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=> fil hcaplus
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FILE COVERS 1907 - 4 Nov 2004  VOL 141 ISS 19
FILE LAST UPDATED: 3 Nov 2004  (20041103/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


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=> d stat que
L1          158 SEA FILE=REGISTRY ABB=ON  PLU=ON  (MELATONIN/BI OR MELATONINE/B
                I)
L2            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  "LAURIC DIETHANOLAMIDE"/CN
L6              SEL  PLU=ON  L1 1- CHEM :     479 TERMS
L7        14303 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6
L8        14313 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7 OR ?MELATON?
L9              SEL  PLU=ON  L2 1- CHEM :      96 TERMS
L10        7037 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9
L11        7118 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L10 OR LAUR?(2A)(DIETHANOLAMID
                E OR DI(W)ETHANOLAMIDE)
L12           3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8 AND L11
L16          29 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8 AND LAUR?
L17          26 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L16 NOT L12
L18       16970 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (DIETHANOLAM? OR DI(2W)ETHANOL
                ?)
L21           4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L18 AND L8) NOT L12
L22          28 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L17 OR L21
L23      165964 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ("ANTI-INFLAMMATORY AGENTS"/CV
                 OR "INFLAMMATION INHIBITORS"/CV OR "INFLAMMATION INHIBITORS
                AND ANTIARTHRITICS"/CV OR "ANTI-INFLAMMATORY DRUGS"/CV OR
                "ANTI-INFLAMMATORY SUBSTANCES"/CV OR ANTIINFLAMMATANTS/CV OR
                ANTIINFLAMMATORIES/CV OR ANTIPHLOGISTICS/CV OR ANTIARTHRITICS/C
                V OR "ANTIRHEUMATIC AGENTS"/CV OR MELITTIN/CV OR "INFLAMMATION
                INHIBITORS (L) ANTIARTHRITICS"/CV OR "INFLAMMATION INHIBITORS
                (L) ANTIRHEUMATICS"/CV OR "INFLAMMATION INHIBITORS (L)
                NONSTEROIDAL"/CV OR "INFLAMMATION INHIBITORS (L) TOPICAL"/CV
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                "6-METHOXY-2-NAPHTHYLACETIC ACID"/CV OR "BECLOMETHASONE
                DIPROPIONATE"/CV OR CELECOXIB/CV OR CROMOLYN/CV OR DICLOFENAC/C
                V OR "DICLOFENAC SODIUM"/CV OR DIFLUNISAL/CV OR ETANERCEPT/CV
                OR "ETHYL 2-CHLOROACETOACETATE"/CV OR "ETHYL ISONIPECOTATE"/CV
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OR ETODOLAC/CV OR FENBUFEN/CV OR FENOPROFEN/CV OR KETOROLAC/CV OR "MECLOFENAMIC ACID"/CV OR "MEFENAMIC ACID"/CV OR MELOXICAM/CV OR "METHYLPREDNISOLONE SODIUM SUCCINATE"/CV OR "NS 398"/CV OR NABUMETONE/CV OR "NIFLUMIC ACID"/CV OR ROFECOXIB/CV OR SUPROFEN/CV OR TENOXICAM/CV OR TOLMETIN/CV OR TRIAMCINOLONE/CV OR "TRIAMCINOLONE ACETONIDE"/CV OR VALDECOXIB/CV OR VIDARABINE/CV)

L24 32591 SEA FILE=HCAPLUS ABB=ON PLU=ON ("ANTI-INFLAMMATORY AGENTS"/CV OR "ANTI-INFLAMMATORY AGENTS (L) NONSTEROIDAL"/CV OR "INFLAMMATION INHIBITORS (L) NONSTEROIDAL"/CV OR "ANTI-INFLAMMATORY ANALGESICS"/CV OR "ASPIRIN-LIKE DRUGS"/CV OR NSAID/CV OR NSAIDS/CV OR "NON-NARCOTIC ANALGESICS"/CV OR "NONSTEROID ANTI-INFLAMMATORY AGENTS"/CV OR "NONSTEROIDAL ANTI-INFLAMMATORY DRUGS"/CV OR "NONSTEROIDAL ANTI-INFLAMMATORY DRUGS (NSAIDS)"/CV OR "NONSTEROIDAL ANTI-RHEUMATIC DRUGS"/CV OR "NONSTEROIDAL ANTIINFLAMMATORY AGENTS"/CV OR "NONSTEROIDAL ANTIINFLAMMATORY COMPDS."/CV OR "NONSTEROIDAL ANTIINFLAMMATORY COMPOUNDS"/CV OR "NONSTEROIDAL ANTIINFLAMMATORY DRUGS"/CV OR "NONSTEROIDAL INFLAMMATION INHIBITORS"/CV)

L25 31180 SEA FILE=HCAPLUS ABB=ON PLU=ON ("ANTI-INFLAMMATORY AGENTS"/CV OR "ANTI-INFLAMMATORY AGENTS (L) TOPICAL"/CV OR "INFLAMMATION INHIBITORS (L) TOPICAL"/CV OR "TOPICAL INFLAMMATION INHIBITORS"/CV)

L26 30829 SEA FILE=HCAPLUS ABB=ON PLU=ON ("ANTI-INFLAMMATORY DRUGS"/CV OR "ANTI-INFLAMMATORY AGENTS"/CV)

L27 134986 SEA FILE=HCAPLUS ABB=ON PLU=ON ("NERVOUS SYSTEM AGENTS"/CV OR "NERVOUS SYSTEM DEPRESSANTS"/CV OR ANALGESICS/CV OR ANODYNES/CV OR "ANTINOCICEPTIVE AGENTS"/CV OR "ANTINOCICEPTIVE COMPOUNDS"/CV OR ANTINOCICEPTIVES/CV OR NARCOTICS/CV OR OPIATES/CV OR "OPIATES AND OPIOIDS"/CV OR OPIOIDS/CV OR BUTORPHANOL/CV OR ENKEPHALINS/CV OR "(D-PEN2, D-PEN5)ENKEPHALIN"/CV OR DADLE/CV OR "LEUCINE ENKEPHALIN"/CV OR "METHIONINE ENKEPHALIN"/CV OR PROENKEPHALIN/CV OR LOPERAMIDE/CV OR NALBUPHINE/CV OR "OPIUM ALKALOIDS"/CV OR ANALGESIA/CV OR ANESTHETICS/CV OR ANTIPYRETICS/CV OR "HYPNOTICS AND SEDATIVES"/CV OR PAIN/CV OR "PAIN RECEPTORS"/CV OR VANILLOIDS/CV OR ALFENTANIL/CV OR BUPIVACAINE/CV OR BUPRENORPHINE/CV OR CODEINE/CV OR DEXTROMETHORPHAN/CV OR DICLOFENAC/CV OR DIFLUNISAL/CV OR DIHYDROCODEINE/CV OR DIHYDROMORPHINE/CV OR FENTANYL/CV OR GABAPENTIN/CV OR HYDROCODONE/CV OR HYDROMORPHONE/CV OR KETOROLAC/CV OR MEPERIDINE/CV OR METAMIZOLE/CV OR MORPHINE/CV OR "MORPHINE SULFATE"/CV OR NEOSTIGMINE/CV OR OXYCODONE/CV OR REMIFENTANIL/CV OR ROPIVACAINE/CV OR SUFENTANIL/CV OR TRAMADOL/CV)

L28 37305 SEA FILE=HCAPLUS ABB=ON PLU=ON ("NERVOUS SYSTEM AGENTS"/CV OR "NERVOUS SYSTEM DEPRESSANTS"/CV OR ANALGESICS/CV OR "ANALGESICS (L) ANTIPYRETIC"/CV OR "ANTIPYRETIC ANALGESICS"/CV)

L29 50 SEA FILE=HCAPLUS ABB=ON PLU=ON "ANALGESICS (L) CENTRAL ANALGESICS"/CV

L30 37305 SEA FILE=HCAPLUS ABB=ON PLU=ON ("NERVOUS SYSTEM AGENTS"/CV OR "NERVOUS SYSTEM DEPRESSANTS"/CV OR ANALGESICS/CV OR "ANALGESICS (L) CENTRAL ANALGESICS"/CV OR "ANALGESICS (L) CENTRAL"/CV OR "CENTRAL ANALGESICS"/CV)

L31 4259 SEA FILE=HCAPLUS ABB=ON PLU=ON ("ANALGESICS (L) NARCOTIC"/CV OR NARCOTICS/CV)

L32 89610 SEA FILE=HCAPLUS ABB=ON PLU=ON (ANALGESIA/CV OR ANTINOCICEPTION/CV OR ANALGESICS/CV OR ANESTHESIA/CV OR NARCOTICS/CV OR "NERVOUS SYSTEM DEPRESSANTS"/CV OR OPIOIDS/CV OR PAIN/CV OR "PAIN RECEPTORS"/CV OR MORPHINE/CV)

L34 322 SEA FILE=HCAPLUS ABB=ON PLU=ON L8(L)((L23 OR L24 OR L25 OR

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              L26 OR L27 OR L28 OR L29 OR L30 OR L31 OR L32))
L35          796 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8(L)RECEPTOR(L)AGON?
L36           14 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L35 AND L34
L37           14 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36 NOT (L12 OR L22)


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=> d ibib abs kwic hitstr l37 1-14

L37  ANSWER 1 OF 14  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2004:467858  HCAPLUS Full-text
DOCUMENT NUMBER:          141:38524
TITLE:                    Preparation of N-arylalkyl-3-aminoalkoxyindoles as
                          5-HT and/or melatonin receptor ligands for treatment
                          of CNS disorders
INVENTOR(S):              Ramakrishna, Venkata Satya Nirogi; Shirsath, Vikas
                          Shreekrishna; Kambhampati, Rama Sastri; Rao, Venkata
                          Satya Veerabhadra Vadlamudi; Jasti, Venkateswarlu
PATENT ASSIGNEE(S):       Suven Life Sciences Limited, India
SOURCE:                   PCT Int. Appl., 83 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
     ---------------      ----   --------    --------------------     --------
     WO 2004048331         A1    20040610    WO 2003-IN371            20031125
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
             BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
             MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
             GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:                        IN 2002-MA885       A  20021128
OTHER SOURCE(S):          MARPAT 141:38524
GI
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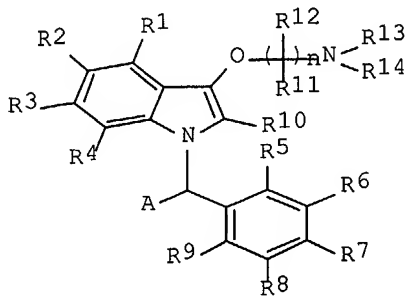

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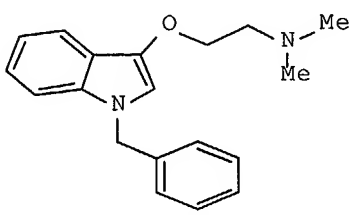


II

AB Title compds. I [wherein R1-R12 = independently H, halo, perhaloalkyl, OH, SH, NH2, NO2, CN, CHO, C(=NH)NH2, guanidino, (un)substituted (cyclo)alkyl, (cyclo)alkenyl, alkynyl, alkoxy, (hetero)aryl(oxy), heterocyclyl(oxy), acyl(oxy), acylamino, carboxy esters, hydrazino, sulfonic acids, phosphoric acids, etc.; or 2 adjacent R-groups together with the C's to which they are attached may form a 5-6 membered (hetero)cycle; or CR11R12 = (hetero)cycle; R13 and R14 = independently H, (ar)alkyl, aryl; or NR13R14 = heterocyclyl; A = 1-2 H, O, OH, alkoxy; n = 1-8, preferably 1-4; with provisos; and stereoisomers, radioisotopes, geometric forms, N-oxides, polymorphs, pharmaceutically acceptable salts, pharmaceutically acceptable solvates, useful bioactive metabolites, prodrugs, and any suitable combination of the above] were prepared as serotonin (5-HT) and/or melatonin receptor modulators (no data). Further described are various methods of administering I, i.e. pharmaceutically acceptable dosage forms, their composition, and their use in either therapy or diagnosis. I and their pharmaceutical compns. are expected to be useful for the treatment of various CNS disorders (no data). For example, [2-[(1H-indol-3-yl)oxy]ethyl]dimethylamine was benzylated using NaH and PhCH2Br in DMF to give II.

IT Glucocorticoid **receptors**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**agonists** or antagonists, combination therapy agents; preparation of N-arylalkyl-3-aminoalkoxyindoles as 5-HT and/or **melatonin receptor** ligands for treatment of CNS disorders)

IT Bombesin **receptors**
Glucagon-like peptide-1 **receptors**
Leptin **receptors**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**agonists**, combination therapy agents; preparation of N-arylalkyl-3-aminoalkoxyindoles as 5-HT and/or **melatonin receptor** ligands for treatment of CNS disorders)

IT Ciliary neurotrophic factor
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antagonists or reverse **agonists**, combination therapy agents; preparation of N-arylalkyl-3-aminoalkoxyindoles as 5-HT and/or **melatonin receptor** ligands for treatment of CNS disorders)

IT Adrenoceptor **agonists**
Adrenoceptor **agonists**
Dopamine **agonists**
(combination therapy agents; preparation of N-arylalkyl-3-aminoalkoxyindoles as 5-HT and/or **melatonin receptor** ligands for treatment of CNS disorders)

IT Neurotransmitter **agonists**
(histaminic H3, reverse, combination therapy agents; preparation of N-arylalkyl-3-aminoalkoxyindoles as 5-HT and/or **melatonin receptor** ligands for treatment of CNS disorders)

IT Alzheimer's disease
Anti-Alzheimer's agents
Anti-ischemic agents
Anticonvulsants
Antidepressants
Antiglaucoma agents
Antimigraine agents
Antiobesity agents
Antiparkinsonian agents
Antipsychotics
Anxiety
Anxiolytics
Cognition enhancers
Convulsion

Digestive tract, disease
Drug withdrawal
Glaucoma (disease)
Human
Nervous system agents
Obesity
Osteoporosis
Parkinson's disease
Polymorphism (crystal)
Schizophrenia
(preparation of N-arylalkyl-3-aminoalkoxyindoles as 5-HT and/or **melatonin** receptor ligands for treatment of CNS disorders)

IT 111745-44-9, Neuromedin U
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**receptor agonists**, combination therapy agents; preparation of N-arylalkyl-3-aminoalkoxyindoles as 5-HT and/or **melatonin receptor** ligands for treatment of CNS disorders)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 2 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:467855 HCAPLUS Full-text
DOCUMENT NUMBER: 141:23419
TITLE: Preparation of N-arylsulfonyl-3-aminoalkoxyindoles as 5-HT and/or melatonin receptor modulators
INVENTOR(S): Ramakrishna, Venkata Satya Nirogi; Shirsath, Vikas Shreekrishna; Kambhampati, Rama Sastri; Rao, Venkata Satya Veerabhadra Vadlamudi; Jasti, Venkateswarlu
PATENT ASSIGNEE(S): Suven Life Sciences Limited, India
SOURCE: PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004048328	A2	20040610	WO 2003-IN370	20031125

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: IN 2002-MA883 A 20021128
OTHER SOURCE(S): MARPAT 141:23419
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [wherein X = (CR11R12)n; n = 1-8; R1-R12 = independently H, halo, perhaloalkyl, OH, SH, NO2, CN, CHO, amidino, guanidino, (un)substituted cyclo/bicyclo/ar/heterocyclyl/amino/thio/alkoxy/alkyl, cyclo/bicycloalkenyl, alkynyl, aryloxy, hetero/aryl, acyl/monoalkyl/dialkyl/aryl/diaryl/aralkyl/alkoxycarbonyl/amino, alkoxycarbonyl, alkylamidino, alkylguanidino, hydrazino, hydroxylamino, CO2H and derivs., SO3H and derivs.; R1CCR2, R2CCR3, R3CCR4, R5CCR6, R6CCR7, R7CCR8, R8CCR9 = 5- or 6-membered ring; R11CCR12 = 3-6 membered ring; R13, R14 = H, ar/alkyl, aryl or R13NR14 = 3-7 membered ring; their stereoisomers, radioisotopes, geometric forms, N-oxides, polymorphs, pharmaceutically acceptable salts and solvates, their useful bio-active metabolites and any suitable combination of the above] were prepared as 5-HT and/or **melatonin receptor** modulators (no data). For example, II was prepared by reacting N-[2-(1H-indol-3- yloxy)ethyl]dimethylamine with 4-bromobenzenesulfonyl chloride in DMF in the presence of NaH. Ten biol. assays are given (no data). I are 5-HT ligands e.g. **agonists** or antagonists (no data). I are **melatonergic** ligands, e.g. **agonists** and antagonists, or they interact with both 5-HT and/or **Melatonin receptors** (no data).

AB . . . as 5-HT and/or **melatonin receptor** modulators (no data).. . . 5-HT ligands e.g. **agonists** or antagonists (number . . data). I are **melatonergic** ligands, e.g. **agonists** and antagonists, or. . . both 5-HT and/or **Melatonin receptors** (no data).

IT Cholecystokinin **receptors**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(CCKA, **agonists**, combination therapy; preparation of N-arylsulfonyl-3-aminoalkoxyindoles as 5-HT and/or **melatonin receptor** modulators)

IT Histamine **receptors**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(H3, reverse **agonists**, combination therapy; preparation of N-arylsulfonyl-3-aminoalkoxyindoles as 5-HT and/or **melatonin receptor** modulators)

IT **Melatonin receptors**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**agonists** and antagonists; preparation of N-arylsulfonyl-3-aminoalkoxyindoles as 5-HT and/or **melatonin receptor** modulators)

IT Bombesin **receptors**
Leptin **receptors**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**agonists**, combination therapy; preparation of N-arylsulfonyl-3-aminoalkoxyindoles as 5-HT and/or **melatonin receptor** modulators)

IT Glucagon-like peptide-1 **receptors**
Glucocorticoid **receptors**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**agonists**; preparation of N-arylsulfonyl-3-aminoalkoxyindoles as 5-HT and/or **melatonin receptor** modulators)

IT Adrenoceptor **agonists**
Dopamine **agonists**
(combination therapy; preparation of N-arylsulfonyl-3-aminoalkoxyindoles as 5-HT and/or **melatonin receptor** modulators)

IT Pituitary hormone **receptors**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(melanocortin **receptor** 4, **agonists**; preparation of N-arylsulfonyl-3-aminoalkoxyindoles as 5-HT and/or **melatonin receptor** modulators)

IT 5-HT **agonists**
5-HT antagonists
Anti-Alzheimer's agents
Anticonvulsants
Antidepressants

Antiglaucoma agents
Antimigraine agents
Antiparkinsonian agents
Antipsychotics
Anxiolytics
Human
Hypnotics and Sedatives
(preparation of N-arylsulfonyl-3-aminoalkoxyindoles as 5-HT and/or **melatonin receptor** modulators)

IT Tachykinin **receptors**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(type NMU, **agonists**; preparation of N-arylsulfonyl-3-aminoalkoxyindoles as 5-HT and/or **melatonin receptor** modulators)

L37 ANSWER 3 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:197432 HCAPLUS Full-text
DOCUMENT NUMBER: 140:296697
TITLE: TAK-375: treatment of insomnia treatment of circadian rhythm disorders melatonin MT1/MT2 agonist
AUTHOR(S): Chilman-Blair, K.; Castaner, J.; Silvestre, J. S.; Bayes, M.
CORPORATE SOURCE: Prous Science, Barcelona, 08080, Spain
SOURCE: Drugs of the Future (2003), 28(10), 950-958
CODEN: DRFUD4; ISSN: 0377-8282
PUBLISHER: Prous Science
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB A review. **Melatonin** is a neurohormone produced in the pineal gland that is involved in the regulation of circadian rhythm function. It works through activation of its intrinsic **receptors** found in the suprachiasmatic nucleus (SCN) within the hypothalamus. **Melatonin** synthesis is under direct neural control from SCN firing. The sleep/wake cycle is a circadian rhythm controlled by this neural complex. Problems in the functioning of this system can therefore lead to sleep disorders. While **melatonin** itself has been shown to be effective in the treatment of sleep disorders, problems due to its ubiquitous action in the brain have limited its use for this indication. TAK-375 is a potent **melatonin receptor agonist**, specific for the ML1 **receptor** subtype known to be intricately involved in circadian rhythm function. TAK-375 has been heralded as an exciting new drug candidate for the treatment of patients with insomnia and circadian rhythm dysfunction. Phase III trials are currently under way to test the drug's viability for use in patients with sleep disorders.

AB A review. **Melatonin** is a neurohormone. . . of its intrinsic **receptors** found in the. . . within the hypothalamus. **Melatonin** synthesis is under. . . sleep disorders. While **melatonin** itself has been. . . is a potent **melatonin receptor agonist**, specific for the ML1 **receptor** subtype known to. . .

IT Human
Hypnotics and Sedatives
Insomnia
Pineal gland
(**melatonin** MT1/MT2 agonist TAK-375 treatment of patients with insomnia and circadian rhythm disorders)

IT **Melatonin receptors**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type MT1, **agonist**; **melatonin** MT1/MT2 **agonist** TAK-375 treatment of patients with insomnia and circadian rhythm disorders)

IT **Melatonin receptors**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type MT2, **agonist**; **melatonin** MT1/MT2 **agonist** TAK-375 treatment of patients with insomnia and

circadian rhythm disorders)
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 4 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:10274 HCAPLUS Full-text
DOCUMENT NUMBER: 136:64149
TITLE: 6H-Isoindolo[2,1-a]indoles or 5,6-dihydroindolo[2,1-a]isoquinolinesas subtype-selective melatonergics for therapeutic use
INVENTOR(S): Jones, Robert M.
PATENT ASSIGNEE(S): Cognetix, Inc., USA
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2002000215	A1	20020103	WO 2001-US19958		20010622
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
AU 2001068677	A5	20020108	AU 2001-68677		20010622
US 2002040018	A1	20020404	US 2001-886609		20010622
PRIORITY APPLN. INFO.:			US 2000-304189P	P	20000623
			US 2001-264695P	P	20010130
			WO 2001-US19958	W	20010622

OTHER SOURCE(S): MARPAT 136:64149

AB The invention discloses the use of MT2 selective **melatonergics** as anticonvulsant agents and as analgesic agents. More specifically, the invention discloses the use of 6H-isoindolo[2,1-a]indoles or 5,6-dihydroindolo[2,1-a]isoquinolines which have **melatonin agonist** activity and which are selective for the MT2 **receptor** as anticonvulsant agents or analgesic agents. The invention further relates to the use of 5,6-dihydroindolo[2,1- a]isoquinolines and 6,7-dihydro-5H-benzo[c]azepino[2,1-a]indoles which have **melatonin** antagonist activity and which are selective for the MT2 **receptor** as pharmacol. tools for delineation of physiol. responses governed by MT2 **receptor** activation either by **melatonin** or selective **agonists** disclosed herein and for treatment of disorders associated with overprodn. of **melatonin** such as seasonal affective disorder (SAD) and shift work syndrome. Such **melatonin** antagonists are also useful for treating Parkinson's Disease.

AB . . . of MT2 selective **melatonergics** as anticonvulsant agents. . . 5,6-dihydroindolo[2,1-a]isoquinolines which have **melatonin agonist** activity and which. . . for the MT2 **receptor** as anticonvulsant agents. . . 6,7-dihydro-5H-benzo[c]azepino[2,1-a]indoles which have **melatonin** antagonist activity and. . . for the MT2 **receptor** as pharmacol. tools. . . governed by MT2 **receptor** activation either by **melatonin** or selective **agonists** disclosed herein and. . . with overprodn. of **melatonin** such as seasonal. . . work syndrome. Such **melatonin** antagonists are also. . .

IT **Analgesics**
Anticonvulsants
Antiparkinsonian agents
(isoindoloindole derivs. and dihydroindoloisoquinoline derivs. as

subtype-selective **melatonergics** for therapeutic use)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 5 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:827718 HCAPLUS Full-text
DOCUMENT NUMBER: 136:113000
TITLE: Melatonin and N-acetylserotonin inhibit leukocyte rolling and adhesion to rat microcirculation
AUTHOR(S): Lotufo, Celina M. C.; Lopes, Cristiane; Dubocovich, Margarita L.; Farsky, Sandra H. P.; Markus, Regina P.
CORPORATE SOURCE: Department of Physiology, Institute of Bioscience, University of Sao Paulo, Sao Paulo, Brazil
SOURCE: European Journal of Pharmacology (2001), 430(2-3), 351-357
CODEN: EJPHAZ; ISSN: 0014-2999
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The hormone **melatonin** produced by the pineal gland during the daily dark phase regulates a variety of biol. processes in mammals. The aim of this study was to determine the effect of **melatonin** and its precursor **N-acetylserotonin** on the microcirculation during acute inflammation. Arteriolar diameter, blood flow rate, leukocyte rolling and adhesion were measured in the rat microcirculation in situ by intravital microscopy. **Melatonin** alone or together with noradrenaline did not affect the arteriolar diameter or blood flow rate. **Melatonin** inhibited both leukocyte rolling and leukotriene B4 induced adhesion while its precursor **N-acetylserotonin** inhibits only leukocyte adhesion. The rank order of potency of **agonists** and antagonist **receptor** selective ligands suggested that the activation of MT2 and MT3 **melatonin** binding sites **receptors** modulate leukocyte rolling and adhesion, resp. The effect of **melatonin** and **N-acetylserotonin** herein described were observed with concns. in the range of the nocturnal surge, providing the first evidence for a possible physiol. role of these hormones in acute inflammation.
AB The hormone **melatonin** produced by the. . . the effect of **melatonin** and its precursor **N-acetylserotonin** on the microcirculation. . . by intravital microscopy. **Melatonin** alone or together. . . blood flow rate. **Melatonin** inhibited both leukocyte. . . while its precursor **N-acetylserotonin** inhibits only leukocyte. . . of potency of **agonists** and antagonist **receptor** selective ligands suggested. . . MT2 and MT3 **melatonin** binding sites **receptors** modulate leukocyte rolling. . . The effect of **melatonin** and **N-acetylserotonin** herein described were. . .
IT Adhesion, biological
Inflammation
Leukocyte
(**melatonin** and acetylserotonin inhibit leukocyte rolling and adhesion to rat microcirculation in acute inflammation)
REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 6 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:854260 HCAPLUS Full-text
DOCUMENT NUMBER: 134:51690
TITLE: Possible mechanisms of action in melatonin reversal of morphine tolerance and dependence in mice
AUTHOR(S): Raghavendra, V.; Kulkarni, S. K.
CORPORATE SOURCE: Pharmacology Division, University Institute of Pharmaceutical Sciences, Panjab University, Chandigarh, 160014, India
SOURCE: European Journal of Pharmacology (2000), 409(3), 279-289
CODEN: EJPHAZ; ISSN: 0014-2999

PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB In our earlier study, we reported the ability of **melatonin** to reverse the development of morphine tolerance and dependence in mice. In the present study, we attempted to analyze the possible involvement of putative **melatonin receptors**, central and peripheral benzodiazepine **receptors** and the nitric oxide (NO) system in the mechanism of **melatonin** reversal of morphine tolerance and dependence in mice. Co-administration of L-NG-nitroarginine Me ester (l-NAME) or **melatonin** with morphine during the induction phase (days 1-9) delayed the development of tolerance to the anti-nociceptive action of morphine and also reversed naloxone precipitated withdrawal jumpings. L-Arginine administration during the induction phase enhanced the development of tolerance to the anti-nociceptive effect of morphine but had no effect on the naloxone-precipitated withdrawal response. During the expression phase (day 10), acute administration of **melatonin** or l-NAME reversed, whereas L-arginine facilitated, naloxone-precipitated withdrawal jumping in morphine-tolerant mice, but none of these drugs affected the nociceptive threshold in morphine-tolerant mice. Further, co-administration of **melatonin** or l-NAME with L-arginine during the induction phase antagonized later the effects on the development of morphine tolerance. Also, prior administration of **melatonin** or l-NAME reversed the L-arginine potentiation of naloxone-precipitated withdrawal jumping in morphine tolerant mice. Among the antagonists for putative **melatonin receptors** studied, neither luzindole (**melatonin** MT1 and MT2 **receptor** antagonist) nor prazosin (**melatonin** MT3 **receptor** antagonist) antagonized the **melatonin** reversal of morphine tolerance and dependence. PK 11195, a peripheral but not central benzodiazepine **receptor** antagonist, flumazenil, partially antagonized the **melatonin** reversal of naloxone-precipitated withdrawal jumping in morphine-dependent mice, but had no effect on the reversal of morphine tolerance induced by **melatonin**. Overall, the present observations suggest that the **melatonin**-induced reversal of morphine tolerance and dependence may involve its ability to suppress nitric oxide synthase (NOS) activity. Further, the **melatonin**-induced reversal of morphine tolerance and dependence is not mediated through its actions via putative **melatonin receptors**. The **agonistic** activity of **melatonin** towards peripheral benzodiazepine **receptors** may partially contribute to the suppression of morphine dependence but not to the reversal of tolerance to the analgesic activity of morphine.

AB . . . the ability of **melatonin** to reverse the. . . involvement of putative **melatonin receptors**, central and peripheral benzodiazepine **receptors** and the nitric. . . the mechanism of **melatonin** reversal of morphine. . . ester (l-NAME) or **melatonin** with morphine during. . . acute administration of **melatonin** or l-NAME reversed,. . . Further, co-administration of **melatonin** or l-NAME with. . . prior administration of **melatonin** or l-NAME reversed. . . antagonists for putative **melatonin receptors** studied, neither luzindole (**melatonin** MT1 and MT2 **receptor** antagonist) nor prazosin (**melatonin** MT3 **receptor** antagonist) antagonized the **melatonin** reversal of morphine. . . not central benzodiazepine **receptor** antagonist, flumazenil, partially antagonized the **melatonin** reversal of naloxone-precipitated. . . tolerance induced by **melatonin**. Overall, the present. . . suggest that the **melatonin**-induced reversal of morphine. . . activity. Further, the **melatonin**-induced reversal of morphine. . . actions via putative **melatonin receptors**. The **agonistic** activity of **melatonin** towards peripheral benzodiazepine **receptors** may partially contribute. . .

IT **Analgesia**
Drug dependence
Drug tolerance
(**melatonin** reversal of morphine tolerance and dependence in mice and mechanisms therefor)

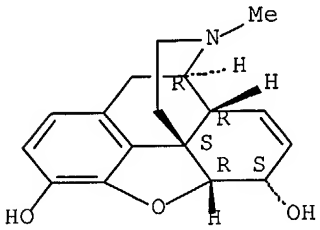
IT **57-27-2**, Morphine, biological studies
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(**melatonin** reversal of morphine tolerance and dependence in mice and mechanisms therefor)

IT **57-27-2**, Morphine, biological studies
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)

(**melatonin** reversal of morphine tolerance and dependence in mice and mechanisms therefor)

RN 57-27-2 HCAPLUS
CN Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-, (5α,6α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 7 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:265068 HCAPLUS Full-text
DOCUMENT NUMBER: 129:12765
TITLE: Pineal opioid receptors and analgesic action of melatonin
AUTHOR(S): Ebadi, Manuchair; Govitrapong, Piyarat; Phansuwanpujito, Pansiri; Nelson, Francine; Reiter, Russel J.
CORPORATE SOURCE: Department of Pharmacology, University of Nebraska College of Medicine, Omaha, NE, 68198-6260, USA
SOURCE: Journal of Pineal Research (1998), 24(4), 193-200
CODEN: JPRSE9; ISSN: 0742-3098
PUBLISHER: Munksgaard International Publishers Ltd.
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB A review, with .apprx.100 refs. Physicians have noted since antiquity that their patients complained of less pain and required fewer analgesics at night times. In most species, including the humans, the circulating levels of **melatonin**, a substance with analgesic and hypnotic properties, exhibit a pronounced circadian rhythm with serum levels being high at night and very low during day times. Moreover, **melatonin** exhibits maximal analgesic effects at night, pinealectomy abolishes the analgesic effects of **melatonin**, and mu opioid **receptor** antagonists disrupt the day-night rhythm of nociception. It is believed that **melatonin**, with its sedative and analgesic effects, is capable of providing a pain free sleep so that the body may recuperate and restore itself to function again at its peak capacity. Moreover, in conditions when pain is associated with extensive tissue injury, **melatonin's** ability to scavenge free radicals and abort oxidative stress is yet another beneficial effect to be realized. Since **melatonin** may behave as a mixed opioid **receptor agonist**-antagonist, it is doubtful that a physician simply could potentiate the analgesic efficacy of narcotics such as morphine by coadministering **melatonin**. Therefore, future, research may synthesize highly efficacious **melatonin** analogs capable of providing maximum analgesia and hopefully being devoid of addiction liability now associated with currently available narcotics.

AB . . . circulating levels of **melatonin**, a substance with. . . day times. Moreover, **melatonin** exhibits maximal analgesic. . . analgesic effects of **melatonin**, and mu opioid **receptor** antagonists disrupt the. . . is believed that **melatonin**, with its sedative. . . extensive tissue injury, **melatonin's** ability to scavenge. . . be realized. Since **melatonin** may behave as. . . a mixed opioid

receptor agonist-antagonist, it is doubtful. . . morphine by coadministering **melatonin**. Therefore, future, research. . . synthesize highly efficacious **melatonin** analogs capable of. . .

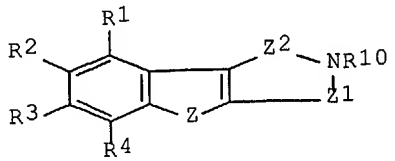
IT **Analgesia**
Analgesics
Antioxidants
Pineal gland
(pineal opioid receptors and analgesic action of **melatonin**)

REFERENCE COUNT: 93 THERE ARE 93 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:425286 HCAPLUS Full-text
DOCUMENT NUMBER: 125:86622
TITLE: Preparation of β -carbolines and analogs as **melatonin receptor agonists**
INVENTOR(S): Fourtillan, Jean-Bernard; Fourtillan, Marianne; Jacquesy, Jean-Claude; Jouannetaud, Marie-Paule; Violeau, Bruno; Karam, Omar
PATENT ASSIGNEE(S): Cemaf, Fr.; Laboratoires Besins Iscovesco
SOURCE: PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9608490	A1	19960321	WO 1995-FR1179		19950914
W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, TJ, TT, UA, US, UZ, VN					
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
FR 2724384	A1	19960315	FR 1994-10964		19940914
FR 2724384	B1	19990416			
AU 9534755	A1	19960329	AU 1995-34755		19950914
EP 781281	A1	19970702	EP 1995-931243		19950914
EP 781281	B1	20011219			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE					
CN 1161039	A	19971001	CN 1995-195692		19950914
CN 1046514	B	19991117			
JP 10505606	T2	19980602	JP 1996-509960		19950914
AT 211138	E	20020115	AT 1995-931243		19950914
ES 2169147	T3	20020701	ES 1995-931243		19950914
PT 781281	T	20020830	PT 1995-931243		19950914
ZA 9601898	A	19960917	ZA 1996-1898		19960308
PRIORITY APPLN. INFO.:			FR 1994-10964	A	19940914
			WO 1995-FR1179	W	19950914

OTHER SOURCE(S): MARPAT 125:86622
GI



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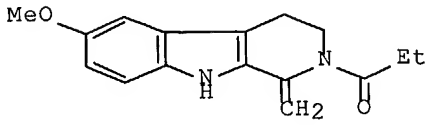


II

AB Title compds. [I; R1-R4 = H, halo, alkyl, alkoxy, etc.; R10 = H, alkyl, aryl, alkanoyl, etc.; Z = NR5, CR6:CR7; Z1 = CO, CR8R9, C:CR8R9; R5 = H, alkyl, aryl(alkyl), etc.; R6-R9 = H, OH, alkyl, alkoxy, etc.; R9R10 = atoms to form a ring; Z2 = (un)substituted C1-3 alk(en)ylene] were prepared Thus, 10-methoxyharmalan was N-acylated by EtCOCl to give title compound II. Data for sedative-hypnotic activity of I in chicks were given.

TI . . . and analogs as **melatonin receptor agonists**

ST carboline beta prepn **melatonin receptor agonist**; sedative hypnotic carboline. . .

IT **Hypnotics and Sedatives**
(preparation of β -carbolines and analogs as **melatonin receptor agonists**)

IT **Receptors**
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
(**melatonin**, mediated disorders; treatment; preparation of β -carbolines and analogs as **melatonin receptor agonists**)

IT 17952-68-0P 36066-85-0P 61828-58-8P 91751-36-9P 107620-38-2P
178552-85-7P 178552-86-8P 178552-87-9P 178552-88-0P 178552-89-1P
178552-90-4P 178552-91-5P 178552-92-6P 178552-93-7P 178552-94-8P
178552-95-9P 178552-96-0P 178552-97-1P 178552-98-2P 178552-99-3P
178553-00-9P 178553-01-0P 178553-02-1P 178553-03-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of β -carbolines and analogs as **melatonin receptor agonists**)

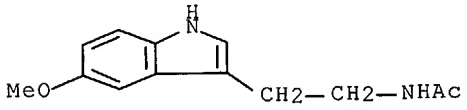
IT **73-31-4, Melatonin** 93-97-0, Benzoic anhydride
103-71-9, Phenyl isocyanate, reactions 105-53-3, Diethyl malonate
106-31-0, Butyric anhydride 123-62-6, Propionic anhydride 304-21-2, Harmaline 525-41-7, Harmalan 541-41-3, Ethyl chloroformate
608-07-1, 5-Methoxytryptamine 818-38-2,
Diethyl glutarate 1210-56-6 3523-59-9, 2-(6-Methoxy-1-naphthyl)ethylamine 3589-73-9 4023-34-1, Cyclopropylcarbonyl chloride
138113-09-4, 2-(7-Methoxy-1-naphthyl)ethylamine 178553-05-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of β -carbolines and analogs as **melatonin receptor agonists**)

IT **53350-25-7P** 178553-04-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of β -carbolines and analogs as **melatonin receptor agonists**)

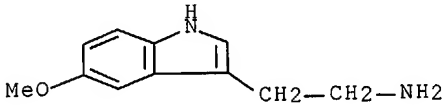
IT **73-31-4, Melatonin 608-07-1, 5-Methoxytryptamine**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of β -carbolines and analogs as **melatonin**

receptor agonists)

RN 73-31-4 HCAPLUS
CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)

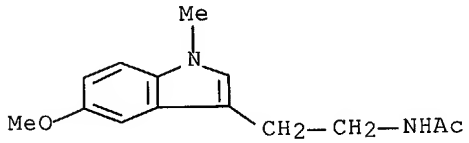


RN 608-07-1 HCAPLUS
CN 1H-Indole-3-ethanamine, 5-methoxy- (9CI) (CA INDEX NAME)



IT **53350-25-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of β -carbolines and analogs as **melatonin receptor agonists**)

RN 53350-25-7 HCAPLUS
CN Acetamide, N-[2-(5-methoxy-1-methyl-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



L37 ANSWER 9 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:135159 HCAPLUS Full-text
DOCUMENT NUMBER: 124:220352
TITLE: Effects of local anesthetics, carbachol, 4-aminopyridine and neostigmine administered at nighttime on plasma concentrations of melatonin in rats
AUTHOR(S): Uchida, Kazuhide; Aoki, Tadashi; Sato, Hisashi; Takahashi, Keizo; Hattori, Atsuhiko; Migitaka, Hiro; Suzuki, Takuro; Fusama, Shigeyoshi; Ishizuka, Bunpei
CORPORATE SOURCE: School Medicine, Marianna Univ., Kawasaki, 216, Japan
SOURCE: Sei Marianna Ika Daigaku Zasshi (1995), 23(5), 1030-4
CODEN: SMIZDS; ISSN: 0387-2289
PUBLISHER: Sei-Marianna Ika Daigaku Igakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB Levels of plasma **melatonin** concentration were observed continuously in patients undergoing esophageal surgery. Plasma **melatonin** concentration in normal stage is

low (<40 pg/mL) in daytime and high (40-150 pg/mL) in nighttime. The purpose of this study is to examine the causes of abnormal values in the patients during nighttime. Local anesthetics of perioperative use and cholinergic **receptor agonists** were administered s.c. to rats at 0:00 (midnight). Plasma **melatonin** levels were determined by RIA in blood samples collected from the heart at 1:30. The values (80 ± 36 pg/mL, 72 ± 25 pg/mL) in the groups administered mepivacaine or bupivacaine (p <0.05 and p <0.001) were significantly lower than the control value. There were no differences of **melatonin** concns. among 4-aminopyridine of low dose (75 μg), neostigmine, and placebo groups. However, the **melatonin** concns. in carbachol, 4-aminopyridine in high dose (150 μg) groups were significantly lower than the control value. These results suggest that local anesthetics and cholinergic **receptor agonists** inhibit the biosynthesis of **melatonin** in nighttime.

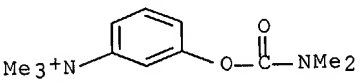
AB Levels of plasma **melatonin** concentration were observed. . . esophageal surgery. Plasma **melatonin** concentration in normal. . . use and cholinergic **receptor agonists** were administered s.c.. . . 0:00 (midnight). Plasma **melatonin** levels were determined. . . no differences of **melatonin** concns. among 4-aminopyridine. . groups. However, the **melatonin** concns. in carbachol,. . . anesthetics and cholinergic **receptor agonists** inhibit the biosynthesis of **melatonin** in nighttime.

IT **Anesthetics**
Cholinergic agonists
(effects of local anesthetics, carbachol, 4-aminopyridine and neostigmine on plasma **melatonin**)

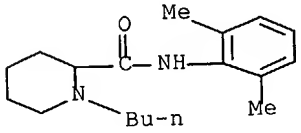
IT 51-83-2, Carbachol **59-99-4**, Neostigmine 96-88-8, Mepivacaine 504-24-5, 4-Aminopyridine **38396-39-3**, Bupivacaine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(effects of local anesthetics, carbachol, 4-aminopyridine and neostigmine on plasma **melatonin**)

IT **59-99-4**, Neostigmine **38396-39-3**, Bupivacaine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(effects of local anesthetics, carbachol, 4-aminopyridine and neostigmine on plasma **melatonin**)

RN 59-99-4 HCAPLUS
CN Benzenaminium, 3-[[(dimethylamino)carbonyl]oxy]-N,N,N-trimethyl- (9CI) (CA INDEX NAME)



RN 38396-39-3 HCAPLUS
CN 2-Piperidinecarboxamide, 1-butyl-N-(2,6-dimethylphenyl)- (9CI) (CA INDEX NAME)

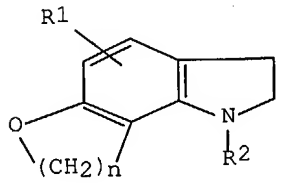


L37 ANSWER 10 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:943453 HCAPLUS Full-text

DOCUMENT NUMBER: 123:340087
TITLE: Preparation of indolines which are **melatonin receptor agonists** and antagonists
INVENTOR(S): North, Peter Charles; Carter, Malcolm Clive
PATENT ASSIGNEE(S): Glaxo Group Ltd., UK
SOURCE: PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9517405	A1	19950629	WO 1994-EP4220	19941220
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN				
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
ZA 9410056	A	19951018	ZA 1994-10056	19941219
CA 2179402	AA	19950629	CA 1994-2179402	19941220
AU 9512743	A1	19950710	AU 1995-12743	19941220
AU 684877	B2	19980108		
EP 736028	A1	19961009	EP 1995-903817	19941220
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
IL 112097	A1	19980615	IL 1994-112097	19941221
US 5633276	A	19970527	US 1996-652460	19960614
PRIORITY APPLN. INFO.:			GB 1993-26192	19931222
			WO 1994-EP4220	19941220

OTHER SOURCE(S): MARPAT 123:340087
GI



I

AB The title compds. [I; R1 = H, halogen, C1-6 alkyl; R2 = CR3R4(CH2)pNR5COR6; R3-R5 = H, C1-6 alkyl; R6 = C1-6 alkyl, C3-7 cycloalkyl; p = 1-4; n = 2-4], useful as **melatonin receptor agonists** and antagonists in the treatment of conditions associated with a disturbed functioning of the **melatonin** system [i.e., jet lag (no data), osteoporosis (no data), CNS disorders (no data), etc. (no data)], are prepared and I-containing formulations presented. Thus, 2-(5-chloro-2,3,7,8-tetrahydro-1H-furo[2,3-g]indol-1-yl)ethylamine was amidated with Ac2O, producing N-[2-(5-chloro-2,3,7,8-tetrahydro-1H- furo[2,3-g]indol-1-yl)ethyl]acetamide, m.p. 147-149°, which demonstrated a IC50 against the binding of **melatonin** to rabbit retina of 0.004 nM.

TI . . . indolines which are **melatonin receptor agonists** and antagonists

AB . . . 2-4], useful as **melatonin receptor agonists** and antagonists in. . . functioning of the **melatonin** system [i.e., jet. . . the binding of **melatonin** to rabbit retina. . .

ST furoindolylethylacetamide prepn **melatonin receptor agonist** antagonist; furoindole; indole. . .

IT **Nervous system agents**
(indolines which are **melatonin receptor agonists** and antagonists)

IT **Receptors**
RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)
(**melatonin**, indolines which are **agonists** and antagonists of)

IT 170728-91-3P 170728-92-4P 170729-12-1P 170729-13-2P 170729-14-3P 170729-15-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of indolines which are **melatonin receptor agonists** and antagonists)

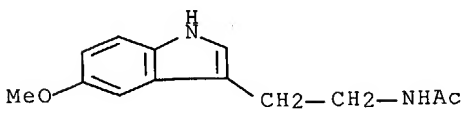
IT **73-31-4, Melatonin**
RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)
(preparation of indolines which are **melatonin receptor agonists** and antagonists)

IT 107-14-2, Chloroacetonitrile 108-24-7, Acetic anhydride 407-25-0, Trifluoroacetic anhydride 624-75-9, Iodoacetonitrile 1816-92-8, Methyl azidoacetate 2032-35-1, Bromoacetaldehyde diethyl acetal 4023-34-1, Cyclopropylcarbonyl chloride 7355-58-0, N-(2-Chloroethyl)acetamide 55745-70-5 61090-37-7 170729-16-5, 2H-1-Benzopyran-5-amine
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of indolines which are **melatonin receptor agonists** and antagonists)

IT 81257-93-4P 170728-93-5P 170728-94-6P 170728-95-7P 170728-96-8P 170728-97-9P 170728-98-0P 170728-99-1P 170729-00-7P 170729-01-8P 170729-02-9P 170729-03-0P 170729-04-1P 170729-05-2P 170729-06-3P 170729-07-4P 170729-08-5P 170729-09-6P 170729-10-9P 170729-11-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of indolines which are **melatonin receptor agonists** and antagonists)

IT **73-31-4, Melatonin**
RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)
(preparation of indolines which are **melatonin receptor agonists** and antagonists)

RN 73-31-4 HCAPLUS
CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



L37 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:412224 HCAPLUS Full-text

DOCUMENT NUMBER: 122:205726
TITLE: Sedative potency and 2-[125I]iodomelatonin binding affinity of melatonin analogs
AUTHOR(S): Sugden, D.
CORPORATE SOURCE: Physiol. Group, Biomed. Sci. Div., King's Coll. London, London, W8 7AH, UK
SOURCE: Psychopharmacology (Berlin) (1995), 117(3), 364-70
CODEN: PSCHDL; ISSN: 0033-3158
PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English

AB **Melatonin** (**5-methoxy N-acetyltryptamine**), the hormone synthesized and released from the pineal gland each night, has sedative and sleep-promoting effects in exptl. animals and man. In the present study, the sedative effect of **melatonin** and a number of analogs was determined by examining their ability to extend the duration of the loss of righting reflex ("sleeping time") in mice injected with pentobarbitone (50 mg/kg IV). All of the analogs tested produced a dose-related (5-20 mg/kg) potentiation of pentobarbitone sleeping time. In radioligand binding assays using 2-[125I] **iodomelatonin** in chicken brain membranes, all of the analogs were competitive inhibitors. There was no correlation between their ability to inhibit 2-[125I]**iodomelatonin** binding in the chick and sedative potency in the mouse. Potentiation of pentobarbitone sleeping time by diazepam (1 mg/kg IP), but not **melatonin** (10 mg/kg IP), was blocked by pretreatment with the benzodiazepine antagonist, flumazenil (10 mg/kg IP). Similarly, an increase in pentobarbitone sleeping time produced by the aminoalkylindole cannabinoid **receptor agonist**, WIN 55212-2 (0.5 mg/kg IP), but not that produced by **melatonin** (10 mg/kg IP) was reduced by the cannabinoid **receptor** antagonist WIN 56098 (5 mg/kg IP). These studies confirm that **melatonin** has sedative activity and show that this action is shared by several structurally-related analogs but does not appear to be mediated by an interaction with benzodiazepine or cannabinoid **receptors**.

AB **Melatonin** (**5-methoxy N-acetyltryptamine**), the hormone synthesized. . . sedative effect of **melatonin** and a number. . . binding assays using 2-[125I] **iodomelatonin** in chicken brain. . . ability to inhibit 2-[125I] **iodomelatonin** binding in the. . . IP), but not **melatonin** (10 mg/kg IP),. . . the aminoalkylindole cannabinoid **receptor agonist**, WIN 55212-2 (0.5. . . that produced by **melatonin** (10 mg/kg IP). . . by the cannabinoid **receptor** antagonist WIN 56098. . . studies confirm that **melatonin** has sedative activity. . . benzodiazepine or cannabinoid **receptors**.

IT **Hypnotics and Sedatives**
(sedative potency and 2-[125I]**iodomelatonin** binding affinity of **melatonin** analogs)

L37 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1994:261681 HCAPLUS Full-text
DOCUMENT NUMBER: 120:261681
TITLE: Effects of some opiates and opioid peptide eyedrops on ocular melatonin regulation in rabbits
AUTHOR(S): Rohde, Brooks H.; Zhu, Ming; El Messiry, Salwa; Chiou, George C. Y.
CORPORATE SOURCE: Coll. Med., TAMU, College Station, TX, 77843, USA
SOURCE: Ophthalmic Research (1993), 25(6), 378-85
CODEN: OPRSAQ; ISSN: 0030-3747
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Levels of **melatonin** in rabbit eye tissues were detected by RIA. Solns. of met-enkephalin, leu-enkephalin, α-endorphin and β-endorphin were given topically. The met-enkephalin and α-endorphin lowered levels of **melatonin** in the iris, iris root-ciliary body, retina and choroid; leu-enkephalin raised levels in the retina and lowered them in other tissues. β-Endorphin only lowered levels in the iris root-

ciliary body. DAGO (a μ **agonist**) given i.v. lowered levels of **melatonin** in the iris, iris root-ciliary body and retina. The δ and σ **agonists** given i.v. only lowered levels in the iris root-ciliary body, and a κ **agonist** given i.v. raised levels in the ciliary body. No opiate binding sites could be detected in the rabbit iris or iris root-ciliary body for any class of **receptor**. The authors' data suggest opioids may be useful for treating glaucoma.

AB Levels of **melatonin** in rabbit eye. . . lowered levels of **melatonin** in the iris,. . . . DAGO (a μ **agonist**) given i.v. lowered levels of **melatonin** in the iris,. . . . δ and σ **agonists** given i.v. only. . . and a κ **agonist** given i.v. raised. . . any class of **receptor**. The authors' data. . .

IT **Opioids**
RL: BIOL (Biological study)
(**melatonin** of eye tissues response to topical)

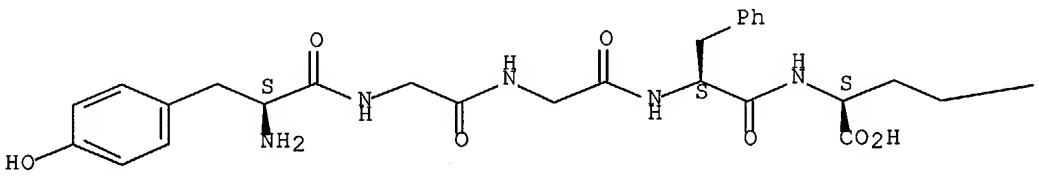
IT **58569-55-4**, Met-enkephalin **58822-25-6**, Leucine enkephalin 60617-12-1, β-Endorphin 61512-76-3, α-Endorphin
RL: BIOL (Biological study)
(**melatonin** of eye tissues response to topical)

IT **58569-55-4**, Met-enkephalin **58822-25-6**, Leucine enkephalin
RL: BIOL (Biological study)
(**melatonin** of eye tissues response to topical)

RN 58569-55-4 HCAPLUS
CN 1-5-Adrenorphin (human) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

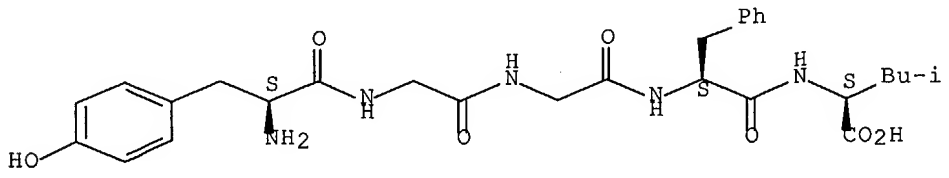


PAGE 1-B

—SMe

RN 58822-25-6 HCAPLUS
CN 1-5-β-Neoendorphin (human) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L37 ANSWER 13 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:140215 HCAPLUS Full-text
DOCUMENT NUMBER: 118:140215
TITLE: The presence and actions of opioid receptors in bovine pineal gland
AUTHOR(S): Govitrapong, P.; Pariyanonth, M.; Ebadi, M.
CORPORATE SOURCE: Inst. Sci. Technol. Res. Dev., Mahidol Univ., Salaya, Thailand
SOURCE: Journal of Pineal Research (1992), 13(3), 124-32
CODEN: JPRSE9; ISSN: 0742-3098
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The mammalian pineal gland and its main hormone, **melatonin**, working in conjunction with the hypothalamic suprachiasmatic nuclei, synchronize circadian rhythm and hence refine numerous physiol. and biochem. parameters. An interaction among **melatonin**, opioids, and analgesia has been suspected for many years, since during nighttime, when the level of **melatonin** is high, the mammals are less sensitive to pain. In studying this phenomenon further, a single population of opioid **receptors** has been identified in the bovine pineal gland using [3H]-diprenorphine and other ligands. The **receptors** have a dissociation equilibrium constant (Kd) of 1.36 nM and a d. (Bmax) of 17.93 fmol/mg protein. In competitive expts., the concentration of drugs required to inhibit 50% of the [3H]-diprenorphine binding (IC50) in descending order of potency was found to be naltrexone > fentanyl > naloxone > nalbuphine > morphine > nalorphine > DAGO > dynorphin > metenkephalin. In order to delineate the function of the opioid system in the pineal gland, the effects of both opioid **receptor agonists** and antagonists on the basal activity of N-acetyltransferase were examined in the bovine pineal explants in culture. Morphine, an opioid **receptor agonist**, increased significantly the activity of N-acetyltransferase in a dose-dependent fashion. In addition, the stimulatory effect of morphine was inhibited by naloxone, an opioid **receptor** antagonist. The results of these studies indicate the existence of pineal opioid **receptors**, which play a pivotal role in the synthesis of **melatonin** and its action in synchronizing pineal events.

AB . . . its main hormone, **melatonin**, working in conjunction. . . An interaction among **melatonin**, opioids, and analgesia. . . the level of **melatonin** is high, the. . . population of opioid **receptors** has been identified. . . other ligands. The **receptors** have a dissociation. . . of both opioid **receptor agonists** and antagonists on. . . Morphine, an opioid **receptor agonist**, increased significantly the. . . naloxone, an opioid **receptor** antagonist. The results. . . of pineal opioid **receptors**, which play a. . . the synthesis of **melatonin** and its action. . .

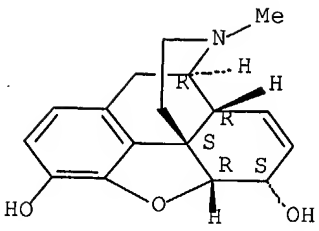
IT **Opioids**
RL: BIOL (Biological study)
(receptors, of pineal gland, **melatonin** formation in relation to)

IT **57-27-2**, Morphine, biological studies
RL: BIOL (Biological study)
(**melatonin** formation stimulation by, in pineal gland, opioid receptors in mediation of)

IT **57-27-2**, Morphine, biological studies
RL: BIOL (Biological study)
(**melatonin** formation stimulation by, in pineal gland, opioid receptors in mediation of)

RN 57-27-2 HCAPLUS
CN Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-, (5α,6α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L37 ANSWER 14 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1983:606815 HCAPLUS Full-text
DOCUMENT NUMBER: 99:206815
TITLE: Modulation of an adenylate cyclase-linked serotonin (5-HT1) receptor system in a neuroblastoma + brain explant hybrid cell line (NCB-20) by opiates, prostaglandins, and α2-adrenergic agonists
AUTHOR(S): Berry-Kravis, Elizabeth; Dawson, Glyn
CORPORATE SOURCE: Joseph P. Kennedy, Jr. Ment. Retard. Res. Cent., Univ. Chicago, Chicago, IL, 60637, USA
SOURCE: Advances in Biochemical Psychopharmacology (1983), 37, 361-72
CODEN: ABPYBL; ISSN: 0065-2229
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Mouse neuroblastoma + Chinese hamster brain hybrid cell line NCB-20 showed 10 times as many low-affinity binding sites for serotonin [50-67-9] as high-affinity binding sites. Serotonin **agonists**, 5,6-dihydroxytryptamine [5090-36-8], **5-methoxytryptamine** [**608-07-1**], serotonin, and methysergide were 10 times as potent as inhibitors of [3H]serotonin binding to high-affinity sites than cyproheptadine, mianserin, clozapine, and spiperone. Dopamine **agonists** and antagonists, norepinephrine [51-41-2], opiates, and opioids had low potency for displacing serotonin. Guanine nucleotides and Mn2+ decreased **agonist** but not antagonist binding, whereas Na+ and Ca2+ increased binding and K+ was without effect. Guanylyl imidodiphosphate reversed the Na+ and Ca2+ effects, but in combination with Mn2+ increased binding by 160% over controls and 100% over Mn2+ alone. Serotonin, in the presence of IBMX, increased the intracellular, cAMP [60-92-4] levels in NCB-20 cells. [D-Ala2,D-Leu5]-enkephalin (I) [**63631-40-3**] (10 μM) decreased the level of serotonin (10 μM)-stimulated cAMP by 50% and decreased the basal cAMP level only slightly. Prolonged treatment with I caused a supersensitivity to serotonin. Naloxone reversed the stimulation of adenylate cyclase [9012-42-4] by PGE1 [745-65-3] in NCB-20 cells, an effect which itself was reversed after 24-48 h, with no apparent supersensitivity to PGE1. The NCB-20 clonal cell line contains a number of adenylate cyclase-linked **receptor** systems which may be useful in the study of central nervous system **receptor** mechanisms.

AB . . . binding sites. Serotonin **agonists**, 5,6-dihydroxytryptamine [5090-36-8], **5- methoxytryptamine** [**608-07-1**], serotonin, and methysergide. . . and spiperone. Dopamine **agonists** and antagonists, norepinephrine. . . and Mn2+ decreased **agonist** but not antagonist. . . cells. [D-Ala2,D-Leu5]-enkephalin (I) [**63631-40-3**] (10 μM) decreased. . . of adenylate cyclase-linked **receptor** systems which may. . . central nervous system **receptor** mechanisms.

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FILE LAST UPDATED: 3 Nov 2004  (20041103/ED)

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L1          158 SEA FILE=REGISTRY ABB=ON  PLU=ON  (MELATONIN/BI OR MELATONINE/B
                I)
L2            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  "LAURIC DIETHANOLAMIDE"/CN
L6              SEL  PLU=ON  L1 1- CHEM :     479 TERMS
L7        14303 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6
L8        14313 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7 OR ?MELATON?
L9              SEL  PLU=ON  L2 1- CHEM :      96 TERMS
L10        7037 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9
L11        7118 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L10 OR LAUR?(2A)(DIETHANOLAMID
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L12           3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8 AND L11


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L12  ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2001:152517  HCAPLUS Full-text
DOCUMENT NUMBER:          134:183534
TITLE:                    Percutaneous absorption agents containing
                          melatonin agonists
INVENTOR(S):              Suzuki, Yasuyuki; Iga, Katsumi; Miyamoto, Masaomi
PATENT ASSIGNEE(S):       Takeda Chemical Industries, Ltd., Japan
SOURCE:                   PCT Int. Appl., 69 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001013950	A1	20010301	WO 2000-JP5525	20000818
W: AE, AG, AL, AM, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CN, CR, CU, CZ, DM, DZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
JP 2001131089	A2	20010515	JP 2000-254233	20000818
EP 1214944	A1	20020619	EP 2000-953481	20000818
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				

PRIORITY APPLN. INFO.: JP 1999-234106 A 19990820
WO 2000-JP5525 W 20000818

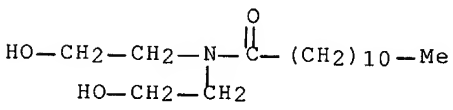
OTHER SOURCE(S): MARPAT 134:183534

AB Percutaneous absorption agents which make it possible to absorb compds. having a **melatonin** receptor agonism via a convenient administration system, have favorable blood concentration passage characteristics and can exert a therapeutic effect on a disease caused by a decrease in **melatonin** at night. The compns. comprise **melatonin** agonists and ≥ 1 compds. selected from the group consisting of fatty acid esters, polyhydric alcs., and nonionic surfactants. A patch was prepared containing (S)-N-[2-(1,6,7,8-tetrahydro-2H-indeno[5,4-b]furan-8- yl)ethyl]propionamide 7.5, DuroTak 87-2979 47.5, **lauric acid diethanolamide** 5.0, iso-Pr myristate 20, and propylene glycol 20 %.

IT **120-40-1, Lauric acid diethanolamide**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(transdermal prepns. containing **melatonin** agonists for treatment of sleep disorders)

RN 120-40-1 HCAPLUS

CN Dodecanamide, N,N-bis(2-hydroxyethyl)- (6CI, 8CI, 9CI) (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:14983 HCAPLUS Full-text
DOCUMENT NUMBER: 132:83650
TITLE: Solid dispersed preparation of poorly water-soluble drug containing oil, fatty acid or mixtures thereof
INVENTOR(S): Lee, Beom Jin
PATENT ASSIGNEE(S): Won Jin Biopharma Co., Ltd., S. Korea
SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

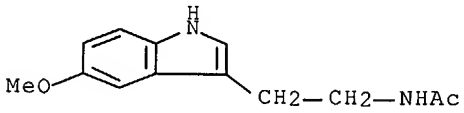
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2000000179	A1	20000106	WO 1999-KR341	19990628
W: AU, CA, CN, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
KR 2000006503	A	20000125	KR 1999-24437	19990626
AU 9946556	A1	20000117	AU 1999-46556	19990628
PRIORITY APPLN. INFO.:			KR 1998-24563 A	19980627
			KR 1999-24437 A	19990626
			WO 1999-KR341 W	19990628

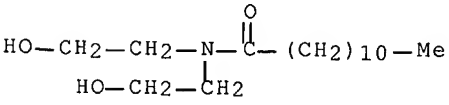
AB Disclosed is a solid dispersed preparation for poorly water-soluble drugs, which is prepared by dissolving or dispersing the poorly water-soluble drugs in an oil, a fatty acid or a mixture thereof, mixing the solution or dispersion in a water-soluble polyol matrix and drying the mixture The solid dispersed preparation can be formulated into a power formulation or a granule formulation. The solid dispersed preparation is improved in the solubility of poorly water-soluble drugs in the gastro-intestinal tract, resulting in a great increase in the bioavailability of the drugs. In addition, the solid dispersed preparation gives the pharmaceutical solns. to the problems that the conventional semi-solid or liquid prepns. possess, enabling medicinally effective, poorly water-soluble compds. to be formulated, molded and processed, quickly and in an economically favorable manner without use of any organic solvent. Examples are given for emulsions containing mixts. of waxes, oils, and aqueous phase.

IT **73-31-4, Melatonin 120-40-1D, Lauric acid diethanolamide,** coco acyl derivs.
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(solid dispersed preparation of poorly water-soluble drug containing oils and fatty acid or mixts.)

RN 73-31-4 HCAPLUS
CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



RN 120-40-1 HCAPLUS
CN Dodecanamide, N,N-bis(2-hydroxyethyl)- (6CI, 8CI, 9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:268388 HCAPLUS Full-text
DOCUMENT NUMBER: 128:326524
TITLE: Permeation enhancers for transdermal drug delivery compositions, devices,and methods
INVENTOR(S): Lee, Eun Soo; Yum, Su Il

PATENT ASSIGNEE(S): Alza Corp., USA
SOURCE: PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9817315	A2	19980430	WO 1997-US18956	19971023
WO 9817315	A3	19980702		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2264687	AA	19980430	CA 1997-2264687	19971023
AU 9749907	A1	19980515	AU 1997-49907	19971023
EP 934078	A2	19990811	EP 1997-912815	19971023
EP 934078	B1	20021218		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001502693	T2	20010227	JP 1998-519563	19971023
AT 229817	E	20030115	AT 1997-912815	19971023
ES 2191834	T3	20030916	ES 1997-912815	19971023

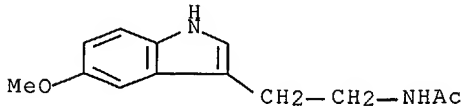
PRIORITY APPLN. INFO.: US 1996-30424P P 19961024
WO 1997-US18956 W 19971023

AB The present invention is directed to the transdermal administration of at least one drug together with a suitable amount of a permeation enhancer comprising monoalkyl ethers of polyethyleneglycol and their alkyl or aryl carboxylic acid esters and carboxymethyl ethers. The invention includes a transdermal drug delivery device comprising a matrix adapted to be placed in drug-and-permeation enhancer-transmitting relation with a skin site. The matrix contains sufficient amts. of the permeation enhancer and drug, in combination, to continuously administer drug to the systemic circulation of a patient at a therapeutically effective rate. The invention is also directed to compns. and methods for transdermal administration of at least one drug together with a permeation enhancer of this invention, alone or in combination with other enhancers. Laureth-4 (30 weight%) alone exhibited about a 4-fold increase in testosterone permeation compared to a sample without any permeation enhancer.

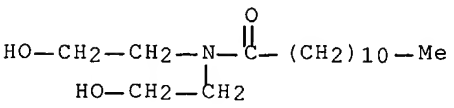
IT **73-31-4, Melatonin 120-40-1,** Dodecanamide, <-- lauric diethanolamide
N,N-bis(2-hydroxyethyl)-
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(permeation enhancers for transdermal drug delivery compns.)

RN 73-31-4 HCAPLUS

CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



RN 120-40-1 HCAPLUS
CN Dodecanamide, N,N-bis(2-hydroxyethyl)- (6CI, 8CI, 9CI) (CA INDEX NAME)



=> d kwic 3

L12 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
IT 58-22-0, Testosterone 64-17-5, Ethanol, biological studies
73-31-4, Melatonin 111-82-0, Methyl laurate
112-66-3, Dodecyl acetate **120-40-1**, Dodecanamide,
N,N-bis(2-hydroxyethyl)- 434-22-0, Nandrolone 3055-93-4, Diethylene glycol monododecyl ether 5274-68-0, Tetraethylene glycol monododecyl ether 5633-20-5, Oxybutynin 6283-92-7, Lauryl lactate 9002-92-0, Polyethylene glycol monolauryl ether 25496-72-4, Glycerol monooleate 26545-74-4, Glycerol monolinoleate 27215-38-9, Glycerol monolaurate 27306-90-7 28981-97-7, Alprazolam 48075-52-1 74103-06-3, Ketorolac 176502-77-5 206876-94-0 206876-95-1, 2,5,8,11-Tetraoxatricosanoic acid 206876-96-2 206876-97-3
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(permeation enhancers for transdermal drug delivery compns.)

=> _

=> d stat que
L1 158 SEA FILE=REGISTRY ABB=ON PLU=ON (MELATONIN/BI OR MELATONINE/BI)
L2 1 SEA FILE=REGISTRY ABB=ON PLU=ON "LAURIC DIETHANOLAMIDE"/CN
L5 111 SEA FILE=REGISTRY ABB=ON PLU=ON LAUR?(L)(DIETHANOLAM? OR DI(L)ETHANOL?)
L6 SEL PLU=ON L1 1- CHEM : 479 TERMS
L7 14303 SEA FILE=HCAPLUS ABB=ON PLU=ON L6
L8 14313 SEA FILE=HCAPLUS ABB=ON PLU=ON L7 OR ?MELATON?
L9 SEL PLU=ON L2 1- CHEM : 96 TERMS
L10 7037 SEA FILE=HCAPLUS ABB=ON PLU=ON L9
L11 7118 SEA FILE=HCAPLUS ABB=ON PLU=ON L10 OR LAUR?(2A)(DIETHANOLAMIDE OR DI(W)ETHANOLAMIDE)
L12 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 AND L11
L13 2894 SEA FILE=HCAPLUS ABB=ON PLU=ON L5 OR LAUR?(2A)(DIETHANOLAM? OR DI(2W)ETHANOL?)
L14 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 AND L13
L15 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 NOT L12

=> _

=> d stat que
L1 158 SEA FILE=REGISTRY ABB=ON PLU=ON (MELATONIN/BI OR MELATONINE/BI)
L2 1 SEA FILE=REGISTRY ABB=ON PLU=ON "LAURIC DIETHANOLAMIDE"/CN

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L6              SEL  PLU=ON  L1 1- CHEM :      479 TERMS
L7         14303 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6
L8         14313 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7 OR ?MELATON?
L9              SEL  PLU=ON  L2 1- CHEM :       96 TERMS
L10         7037 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9
L11         7118 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L10 OR LAUR?(2A)(DIETHANOLAMID
                 E OR DI(W)ETHANOLAMIDE)
L12            3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8 AND L11
L16           29 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8 AND LAUR?
L17           26 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L16 NOT L12
L18        16970 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (DIETHANOLAM? OR DI(2W)ETHANOL
                 ?)
L21            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L18 AND L8) NOT L12
L22           28 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L17 OR L21


=> d ibib abs kwic hitstr l22 1-28

L22  ANSWER 1 OF 28  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2004:569681  HCAPLUS Full-text
DOCUMENT NUMBER:          141:117191
TITLE:                    Seborrheic keratosis treatment using hydrogen peroxide
INVENTOR(S):              Ancira, Margaret; Miller, Mickey
PATENT ASSIGNEE(S):       USA
SOURCE:                   U.S. Pat. Appl. Publ., 17 pp., Cont.-in-part of U.S.
                          Ser. No. 72,829.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
     ---------------      ----   --------    --------------------     --------
     US 2004137077         A1    20040715    US 2003-684136           20031009
     US 2003008018         A1    20030109    US 2002-72829            20020208
PRIORITY APPLN. INFO.:                       US 2001-267978P     P    20010209
                                             US 2002-72829       A2   20020208
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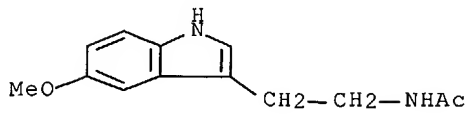
AB The subject of the present invention is seborrheic keratosis removal and prevention utilizing safe dependable effective biocompatible treatments with no scarring, bleeding, burning, freezing, shocking, and hypopigmentation or hyperpigmentation. Seborrheic keratoses are removed by: (a) obtaining a composition comprising hydrogen peroxide in a concentration of at least about 23 %; and (b) applying the composition to a seborrheic keratosis on a seborrheic keratoses afflicted person or domesticated animal. Patients were treated with applications of 35 % hydrogen peroxide. Compns. are presented.

IT 57-09-0, Cetyltrimethylammonium bromide 112-00-5, Dodecyltrimethylammonium chloride 112-02-7, Hexadecyltrimethylammonium chloride 112-03-8, Octadecyltrimethylammonium chloride 123-03-5, Cetylpyridinium chloride 145-42-6, Sodium taurocholate 151-21-3, Sodium **lauryl** sulfate, biological studies 302-95-4, Sodium desoxycholate 361-09-1, Sodium cholate 629-25-4, Sodium **laurate** 1119-97-7, Tetradecyltrimethylammonium bromide 1338-39-2, Span 20 1338-41-6, Span 60 1338-43-8, Span 80 2836-32-0, Sodium glycolate 9002-92-0, Brij 30 9004-98-2, Brij 93 9004-99-3, Myrj 45 26266-57-9, Span 40 77466-09-2, Miglyol 840 106392-12-5, Poloxamer 231
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as surfactant, composition further containing; seborrheic keratosis treatment using hydrogen peroxide)

IT 50-21-5, Lactic acid, biological studies 53-43-0, Dehydroepiandrosterone 56-81-5, Glycerol, biological studies 57-11-4, Stearic acid, biological studies 57-13-6, Urea, biological studies 57-55-6, Propylene glycol, biological studies 57-83-0, Progesterone, biological studies 58-22-0, Testosterone 64-17-5, Ethanol, biological studies 67-68-5, Dimethyl sulfoxide, biological studies 67-71-0, Methylsulfonylmethane 68-12-2, Dimethylformamide, biological studies 69-72-7, Salicylic acid, biological studies 71-23-8, Propanol, biological studies 71-36-3, Butanol, biological studies 71-41-0, Pentanol, biological studies **73-31-4, Melatonin** 77-92-9, Citric acid, biological studies 78-92-2, 2-Butanol 79-14-1, Glycolic acid, biological studies 79-20-9, Methyl acetate 79-33-4, L-Lactic acid, biological studies 80-69-3, Tartronic acid 87-69-4, Tartaric acid, biological studies 87-73-0, Saccharic acid 90-64-2, Mandelic acid 100-51-6, Benzyl alcohol, biological studies 102-71-6, Triethanolamine, biological studies 107-21-1, Ethylene glycol, biological studies 109-52-4, Valeric acid, biological studies 110-15-6, Succinic acid, biological studies 110-27-0, Isopropyl myristate 110-40-7, Diethyl sebacate 111-14-8, Heptanoic acid 111-27-3, Hexanol, biological studies 111-42-2, **Diethanolamine**, biological studies 111-46-6, Diethylene glycol, biological studies 111-62-6, Ethyl oleate 111-65-9, N-Octane, biological studies 111-84-2, N-Nonane 111-87-5, Octanol, biological studies 112-05-0, Pelargonic acid 112-27-6, Triethylene glycol 112-30-1, Decanol 112-40-3, N-Dodecane 112-80-1, Oleic acid, biological studies 123-86-4, Butyl acetate 124-07-2, Caprylic acid, biological studies 124-18-5, N-Decane 127-17-3, Pyruvic acid, biological studies 127-19-5, Dimethylacetamide 134-62-3, Diethyltoluamide 141-78-6, Ethyl acetate, biological studies 142-62-1, Caproic acid, biological studies 142-82-5, N-Heptane, biological studies 142-91-6, Isopropyl palmitate 143-07-7, **Lauric** acid, biological studies 143-08-8, Nonanol 145-13-1, Pregnenolone 156-06-9, β-Phenylpyruvic acid 320-77-4, Isocitric acid 334-48-5, Capric acid 433-48-7, β-Fluoropyruvic acid 473-81-4, Glyceric acid 497-76-7D, Arbutin, isomers 515-30-0, Atrolactic acid 526-95-4, Gluconic acid 526-99-8, Mucic acid 544-63-8, Myristic acid, biological studies 544-76-3, N-Hexadecane 554-12-1, Methyl propionate 594-61-6, 2-Hydroxyisobutyric acid 600-15-7, α-Hydroxybutyric acid 624-24-8, Methyl valerate 629-50-5, N-Tridecane 629-59-4, N-Tetradecane 685-73-4, Galacturonic acid 828-01-3, β-Phenyllactic acid 1118-92-9 1120-21-4, N-Undecane 3079-28-5, Decyl methyl sulfoxide 3402-98-0, Iduronic acid 3416-24-8, Glucosamine 5699-58-1, Acetylpyruvic acid 6032-29-7, 2-Pentanol 6556-12-3, Glucuronic acid 6703-05-5, Lyxaric acid 6814-36-4, Mannuronic acid 6915-15-7, Malic acid 10158-64-2, Xylaric acid 14433-76-2 15769-56-9, Guluronic acid 18494-60-5 23351-51-1, Glucoheptonic acid 24871-35-0, Altronic acid 25265-71-8, Dipropylene glycol 25322-68-3, Polyethylene glycol 28223-51-0, Alluronic acid 28223-52-1, Taluronic acid 30923-19-4, Lyxuronic acid 30923-20-7, Riburonic acid 30923-21-8, Xyluronic acid 30923-39-8, Arabinuronic acid 36413-60-2, Quinic acid 66664-08-2, Pentahydroxyhexanoic acid 83826-43-1, Octyldodecyl myristate 84710-55-4, Threuric acid 84710-56-5, Erythreuric acid 474655-00-0 722493-20-1
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(composition further containing; seborrheic keratosis treatment using hydrogen peroxide)

IT **73-31-4, Melatonin**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(composition further containing; seborrheic keratosis treatment using hydrogen

peroxide)
RN 73-31-4 HCAPLUS
CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



L22 ANSWER 2 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:565063 HCAPLUS Full-text
DOCUMENT NUMBER: 141:99658
TITLE: Milling microgram quantities of nanoparticulate candidate compounds
INVENTOR(S): Cunningham, James; Merisko-Liversidge, Elaine; Cooper, Eugene R.; Liversidge, Gary G.
PATENT ASSIGNEE(S): Elan Pharma International Ltd., Ire.
SOURCE: PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004058216	A2	20040715	WO 2003-US39941	20031217
WO 2004058216	A3	20040910		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-433784P P 20021217

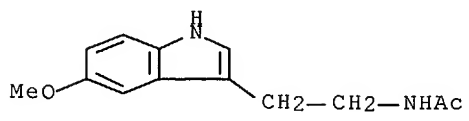
AB The present invention is directed to a method of milling small quantities of one or more candidate compds. to reduce the particle size of at least one candidate compound to about 2 μm or less. The apparatus used for the milling process can be one or more multi-well plates, or any other suitable apparatus The resultant products are dispersions of nanoparticulate candidate compds. The method is particularly suited for increasing the effectiveness of high throughput screening.

IT 56-81-5, Glycerol, biological studies 56-85-9, Glutamine, biological studies 57-09-0, Hexadecyltrimethyl ammonium bromide 57-11-4, Stearic acid, biological studies 57-11-4D, Stearic acid, esters 57-88-5, Cholesterol, biological studies 59-30-3, Folic acid, biological studies 62-49-7D, Choline, esters 68-26-8D, Retinol, ethoxylated derivs. 69-89-6D, Xanthine, derivs. **73-31-4**, **Melatonin** 102-71-6, Triethanolamine, biological studies 112-00-5, **Lauryl** trimethyl ammonium chloride 123-03-5, Cetyl pyridiniumchloride 139-07-1, **Lauryl** dimethyl benzyl ammonium chloride 139-08-2, Tetradecyldimethylbenzyl ammonium chloride 140-72-7, Cetyl pyridinium

bromide 151-21-3, Sodium dodecylsulfate, biological studies 502-65-8, Lycopene, 1119-94-4, Dodecyl trimethyl ammonium bromide 1119-97-7, Tetradecyltrimethylammonium bromide 1200-22-2, Lipoic acid 1327-43-1, Magnesium aluminum silicate 1406-18-4D, Vitamin E, ethoxylated derivs. 1592-23-0, Calcium stearate 1643-19-2, Tetrabutylammonium bromide 2082-84-0, Decyltrimethylammonium bromide 2373-23-1, Dioctylsulfosuccinate 3416-24-8, Glucosamine 5137-55-3, Methyl trioctylammonium chloride 5350-41-4, Benzyl trimethylammonium bromide 7173-51-5, Dimethyldidecyl ammonium chloride 7281-04-1, **Lauryl** dimethyl benzyl ammonium bromide 9000-01-5, Gum acacia 9000-30-0D, Guar gum, cationic derivs. 9000-65-1, Tragacanth 9001-63-2, Lysozyme 9002-89-5, Polyvinyl alcohol 9003-39-8, Polyvinylpyrrolidone 9004-32-4, Carboxymethylcellulose sodium 9004-34-6, Cellulose, biological studies 9004-54-0, Dextran, biological studies 9004-62-0, Hydroxyethylcellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methylcellulose 9004-67-5, Methylcellulose 9004-99-3, Polyoxyethylene stearate 9005-63-4D, Polyoxyethylene sorbitan, fatty acid esters 9007-12-9, Calcitonin 9007-27-6, Chondroitin 9011-14-7, Polymethylmethacrylate 9050-04-8 9050-31-1, Hydroxypropylmethylcellulosephthalate 12441-09-7D, Sorbitan, esters 18186-71-5, Dodecyltriethylammonium bromide 20526-58-3D, dialkyl esters 25086-89-9, Vinyl acetate-vinylpyrrolidone copolymer 25301-02-4 25322-68-3, Polyethylene glycol 25322-68-3D, alkyl ethers 26062-79-3, Polydiallyldimethylammonium chloride 27321-96-6, Polyethylene glycol cholesterol 28228-56-0 28679-24-5, Dodecylbenzyl triethyl ammonium chloride 29836-26-8, n-Octyl-β-D-glucopyranoside 30581-59-0, Dimethylaminoethyl methacrylate-vinylpyrrolidone copolymer 31566-31-1, Glycerol monostearate 38443-60-6, Decyl triethyl ammonium chloride 39995-55-6 52467-63-7, Tricetyl methyl ammonium chloride 55008-57-6, S 1002 58846-77-8, n-Decyl β-D-glucopyranoside 59080-45-4, n-Hexyl β-D-glucopyranoside 59122-55-3, n-Dodecyl β-D-glucopyranoside 61361-72-6, Dimyristoylphosphatidylglycerol 68912-04-9 69227-93-6, n-Dodecyl β-D-maltoside 69984-73-2, n-Nonyl β-D-glucopyranoside 78617-12-6, n-Heptyl-β-D-glucopyranoside 81859-24-7, POLYQUAT 10 82494-09-5 85261-19-4, Nonanoyl-N-methylglucamide 85261-20-7, Decanoyl-N-methylglucamide 85316-98-9 85618-20-8 85618-21-9, Octyl β-D-thioglucopyranoside 101397-87-9 110617-70-4, Poloxamine 512171-84-5, S 1004
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(milling microgram quantities of nanoparticulates with stabilizers for high throughput screening)

IT **73-31-4, Melatonin**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(milling microgram quantities of nanoparticulates with stabilizers for high throughput screening)

RN 73-31-4 HCAPLUS
CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



L22 ANSWER 3 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:161446 HCAPLUS Full-text

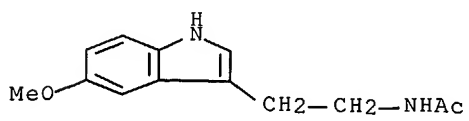
DOCUMENT NUMBER: 141:167161
TITLE: Predicting drug clearance from recombinantly expressed CYPs: intersystem extrapolation factors
AUTHOR(S): Proctor, N. J.; Tucker, G. T.; Rostami-Hodjegan, A.
CORPORATE SOURCE: Mol. Pharmacol. Pharmacognetics, The Royal Hallamshire Hospital, Univ. Sheffield, Sheffield, S10 2JF, UK
SOURCE: Xenobiotica (2004), 34(2), 151-178
CODEN: XENOBH; ISSN: 0049-8254
PUBLISHER: Taylor & Francis Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Recombinantly expressed human cytochromes P 450 (rhCYPs) have been underused for the prediction of human drug clearance (CL). Differences in intrinsic activity (per unit CYP) between rhCYP and human liver enzymes complicate the issue and these discrepancies have not been investigated systematically. The authors define intersystem extrapolation factors (ISEFs) that allow the use of rhCYP data for the in vitro-in vivo extrapolation of human drug CL and the variance that is associated with interindividual variation of CYP abundance due to genetic and environmental effects. A large database of metabolic stability data has been compiled and used to derive ISEFs for the most commonly used expression systems and CYP enzymes. Statistical models were constructed for the ISEFs to determine major covariates to optimize exptl. design to increase prediction accuracy. Suggestions have been made for the conduct of future studies using rhCYP to predict human drug clearance.

IT 50-49-7, Imipramine 58-08-2, Caffeine, biological studies 58-22-0, Testosterone 62-44-2, Phenacetin 64-77-7, Tolbutamide **73-31-4**, **Melatonin** 91-64-5, Coumarin 95-25-0, Chlorzoxazone 100-02-7, 4-Nitrophenol, biological studies 114-07-8, Erythromycin 125-71-3, Dextromethorphan 143-07-7, **Lauric** acid, biological studies 302-79-4, all-Trans Retinoic acid 321-64-2, Tacrine 439-14-5, Diazepam 500-92-5, Proguanil 1131-64-2, Debrisoquine 1951-25-3, Amiodarone 5543-58-8, R-Warfarin 5725-91-7, 7-Ethoxyresorufin 15307-86-5, Diclofenac 15687-27-1, Ibuprofen 21829-25-4, Nifedipine 22204-53-1, Naproxen 28911-01-5, Triazolam 31828-71-4, Mexiletine 33069-62-4, Paclitaxel 33419-42-0, Etoposide 42399-41-7, Diltiazem 42542-10-9, MDMA 43200-80-2, Zopiclone 50679-08-8, Terfenadine 51384-51-1, Metoprolol 52485-79-7, Buprenorphine 54340-62-4, Bufuralol 59467-70-8, Midazolam 59865-13-3, Cyclosporin A 70374-39-9, Lornoxicam 70989-04-7, S-Mephenytoin 72509-76-3, Felodipine 73590-58-6, Omeprazole 79902-63-9, Simvastatin 81024-42-2, S-Metoprolol 81024-43-3, R-Metoprolol 128196-01-0, S-Citalopram 128196-02-1, R-Citalopram 175078-93-0 177540-99-7 220001-53-6
RL: BSU (Biological study, unclassified); PKT (Pharmacokinetics); BIOL (Biological study)
(predicting drug clearance from recombinantly expressed cytochromes P 450's in relation to intersystem extrapolation factors)

IT **73-31-4, Melatonin**
RL: BSU (Biological study, unclassified); PKT (Pharmacokinetics); BIOL (Biological study)
(predicting drug clearance from recombinantly expressed cytochromes P 450's in relation to intersystem extrapolation factors)

RN 73-31-4 HCAPLUS
CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 132 THERE ARE 132 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 4 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:119747 HCAPLUS Full-text
DOCUMENT NUMBER: 140:186978
TITLE: Cosmetic composition comprising an extract of Emblica officinalis
INVENTOR(S): Hansenne, Isabelle; Galdi, Angelike; Fares, Hani; Foltis, Sidney P.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 12 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004028642	A1	20040212	US 2003-424111		20030428
PRIORITY APPLN. INFO.:			US 2002-375416P	P	20020426

AB The present invention concerns cosmetic compns. and methods comprising an extract of E. officinalis and at least one ingredient chosen from dihydroxy acetone, a dibenzoylmethane derivative, ultrafine particles of zinc oxide, ultrafine particles of titanium oxide, astaxanthin, retinoids, alpha-hydroxy acids, beta-hydroxy acids, polyhydroxy acids, hydroquinone, compds. useful for the treatment of dandruff, hair colorants, hair pigments, and hair dyes. The addition of an Emblica extract to these compns. has the advantage of increasing their stability and therefore increasing or prolonging their effectiveness in such cosmetic compns. A cosmetic composition contained deionized water 74.58, disodium EDTA 0.1, Me paraben 0.3, chlorphenesin 0.2, phenoxyethanol 0.7, propylene glycol 4.0, glycerin 4.0, xanthan gum 0.07, butylmethoxydibenzoylmethane (avobenzone) 3.0, octyl salicylate 5.0, propylparaben 0.1, glyceryl stearate and PEG-100 1.0, DC 200 (dimethicone) 0.5, stearic acid 1.0, Ganex 220 1.3, cyclopentasiloxane 2.0, Pemulen TR-1 0.2, deionized water 1.0, triethanolamine 0.45, and E. officinalis extract 0.5%.

IT 69-72-7, Salicylic acid, biological studies **73-31-4**, **Melatonin** 96-26-4, Dihydroxy acetone 103-16-2, Monobenzyl ether hydroquinone 104-28-9, Cinoxate 104-98-3, 3-Imidazol-4-ylacrylic acid 111-42-2, **Diethanolamine**, biological studies 118-56-9, Homomenthyl salicylate 118-60-5, 2-Ethylhexyl salicylate 120-46-7D, Dibenzoylmethane, derivs. 123-31-9, Hydroquinone, biological studies 123-99-9, Azelaic acid, biological studies 131-53-3, Dioxybenzone 131-54-4 131-55-5, 2,2',4,4'-Tetrahydroxybenzophenone 131-56-6, 2,4-Dihydroxybenzophenone 131-57-7, 2-Hydroxy-4-methoxybenzophenone 134-20-3, Methyl anthranilate 136-44-7, Glycerol p-aminobenzoate 136-44-7D, derivs. 150-13-0, p-Aminobenzoic acid 150-76-5, 4-Hydroxyanisole 472-61-7, Astaxanthin 497-76-7, Hydroquinone-β-D-glucopyranoside 644-46-2 830-09-1, p-Methoxycinnamic acid 1843-05-6, 2-Hydroxy-4-n-octoxybenzophenone 2174-16-5 4065-45-6, Sulisobenzone 5466-77-3, Ethylhexyl p-methoxycinnamate 6131-38-0 6197-30-4, 2-Ethylhexyl-2-cyano-3,3-diphenylacrylate 7704-34-9, Sulfur, biological studies 13463-41-7, Pyrithione zinc 18362-51-1, 4,4'-Dimethoxydibenzoylmethane 21245-02-3, 2-Ethylhexyl p-dimethylaminobenzoate 23666-04-8 25855-99-6 26495-98-7D, derivs. 27436-80-2, Digalloyl trioleate 27503-81-7, 2-Phenylbenzimidazole-5-sulfonic acid 27538-35-8 30653-05-5 36275-29-3 36861-47-9

38083-17-9, Climbazole 52793-97-2 55846-72-5 56039-58-8
56093-45-9, Selenium sulfide 56265-46-4 58817-05-3 59870-68-7,
Glabridin 61001-54-5 63250-25-9, 4-Isopropyldibenzoylmethane
63250-26-0 63250-28-2 63250-29-3 65277-42-1, Ketoconazole
68890-66-4, Octopirox 70356-09-1, 4-tert-Butyl-4'-methoxy-
dibenzoylmethane 71617-10-2, Isoamyl 4-methoxycinnamate 88122-99-0
91281-32-2, N-Acetyl-4-S-cysteaminylphenol 92761-26-7 93851-27-5,
2,6-Dimethyl-4-tert-butyl-4'-methoxydibenzoylmethane 93851-28-6,
2-Methyl-5-isopropyl-4'-methoxydibenzoylmethane 93851-29-7,
2-Methyl-5-tert-butyl-4'-methoxydibenzoylmethane 93885-98-4,
2,4-Dimethyl-4'-methoxydibenzoylmethane 94134-93-7, 4-Isopropylbenzyl
salicylate 103597-45-1 113284-00-7, Ethyl 4-
bis(hydroxypropyl)aminobenzoate 126045-00-9, Methyl diisopropylcinnamate
154702-15-5 170864-82-1
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(cosmetic composition comprising extract of Emblica officinalis)

IT **73-31-4, Melatonin**
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(cosmetic composition comprising extract of Emblica officinalis)

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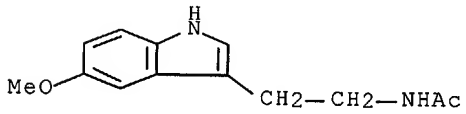
CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



L22 ANSWER 5 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:60341 HCAPLUS Full-text
DOCUMENT NUMBER: 140:117406
TITLE: Liquid dosage compositions of stable nanoparticulate drugs
INVENTOR(S): Bosch, William H.; Hilborn, Matthew R.; Hovey, Douglas C.; Kline, Laura J.; Lee, Robert W.; Pruitt, John D.; Ryde, Niels P.; Ryde, Tuula A.; Xu, Shuqian
PATENT ASSIGNEE(S): Elan Pharma International, Ltd, Ire.
SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 15
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004006959	A1	20040122	WO 2003-US22187	20030716

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,

GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-396530P P 20020716

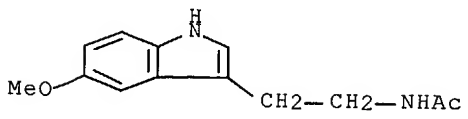
AB The present invention relates to liquid dosage compns. of stable nanoparticulate drugs. The liquid dosage compns. of the invention include osmotically active crystal growth inhibitors that stabilize the nanoparticulate active agents against crystal and particle size growth of the drug. Thus, an aqueous nanoparticulate colloidal dispersion (NCD) comprising drug 32.5 Copovidone 6.5, and dioctyl sodium sulfosuccinate 0.464% by weight was prepared by milling for 3.8 h under high energy milling conditions. The final mean particle size (by weight) of the drug particles was 161 nm. The concentrated NCD was then diluted with preserved water and glycerol (the osmotically active crystal growth inhibitor) to 0.5-3.0% drug.

IT 50-35-1, Thalidomide 50-44-2, Mercaptopurine 50-53-3, Chlorpromazine, biological studies 50-78-2, Acetylsalicylic acid 50-99-7, Glucose, biological studies 52-53-9, Verapamil 56-81-5, Glycerol, biological studies 56-85-9, Glutamine, biological studies 57-09-0, Hexadecyltrimethylammonium bromide 57-11-4, Stearic acid, biological studies 57-48-7, Fructose, biological studies 57-50-1, Sucrose, biological studies 57-55-6, Propylene glycol, biological studies 57-88-5, Cholesterol, biological studies 58-32-2, Dipyridamole 59-30-3, Folic acid, biological studies 62-49-7D, Choline, esters 63-42-3, Lactose 64-17-5, Ethanol, biological studies 67-45-8, Furazolidone 69-65-8, Mannitol 69-89-6D, Xanthine, derivs. **73-31-4, Melatonin** 75-65-0, biological studies 80-74-0, Acetylsulfisoxazole 87-99-0, Xylitol 99-20-7, Trehalose 102-71-6, Triethanolamine, biological studies 110-86-1D, Pyridine, quaternized, salts 112-00-5, **Lauryltrimethylammonium** chloride 123-03-5, CPC 129-03-3, Cyproheptadine 132-17-2, Benztropine mesylate 134-32-7D, 1-Naphthylamine, alkyldimethylammonium salts 139-07-1, **Lauryldimethylbenzylammonium** chloride 140-72-7, Cetylpyridinium bromide 143-67-9, Vinblastine sulfate 148-79-8, Thiabendazole 151-21-3, SDS, biological studies 154-42-7, Thioguanine 288-32-4D, Imidazole, quaternized, salts 303-53-7, Cyclobenzaprine 396-01-0, Triamterene 500-92-5, Proguanil 502-65-8, Lycopene 645-05-6, Altretamine 846-50-4, Temazepam 1119-94-4, Dodecyltrimethylammonium bromide 1119-97-7, Tetradecyltrimethylammonium bromide 1200-22-2, Lipoic acid 1327-43-1, Magnesium aluminum silicate 1592-23-0, Calcium Stearate 1643-19-2, Tetrabutylammonium bromide 1951-25-3, Amiodarone 1977-10-2, Loxapine 2062-78-4, Pimozide 2082-84-0, Decyltrimethylammonium bromide 2609-46-3, Amiloride 3416-24-8, Glucosamine 3458-28-4, Mannose 4205-90-7, Clonidine 4342-03-4, Dacarbazine 5137-55-3, Methyltrioctylammonium chloride 5350-41-4, Benzyltrimethylammonium bromide 7173-51-5, Dimethyldidecylammonium chloride 7281-04-1, **Lauryldimethylbenzylammonium** bromide 7447-40-7, Potassium chloride (KCl), biological studies 7647-14-5, Sodium chloride, biological studies 7786-30-3, Magnesium chloride (MgCl2), biological studies 9000-01-5, Gum acacia 9000-30-0D, Guar gum, cationic derivs. 9000-65-1, Tragacanth gum 9001-63-2, Lysozyme 9002-89-5, Poly(vinyl alcohol) 9003-39-8, Polyvinylpyrrolidone 9004-32-4 9004-34-6, Cellulose, biological studies 9004-54-0, Dextran, biological studies 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hypromellose 9004-67-5, Methyl cellulose 9004-99-3, Polyethylene glycol stearate 9005-32-7, Alginic acid 9007-12-9, Calcitonin 9007-27-6, Chondroitin 9011-14-7, Poly(methyl methacrylate) 9011-14-7D, Poly(methyl methacrylate), hydrolyzed, trimethylammonium salts 9050-04-8, Cellulose, carboxymethyl ether, calcium salt 9050-31-1, Hydroxypropyl methyl cellulose phthalate 10118-90-8, Minocycline 12441-09-7D, Sorbitan, esters 13292-46-1, Rifampin 16679-58-6, Desmopressin 18186-71-5, Dodecyltriethylammonium bromide 24280-93-1 25086-89-9, Vinyl acetate-1-vinyl-2-pyrrolidone copolymer 25301-02-4, Ethylene oxide-formaldehyde-4-(1,1,3,3-Tetramethylbutyl)phenol copolymer 25322-68-3, Polyethylene glycol

25322-68-3D, Polyethylene glycol, phospholipid derivs. 26062-79-3, Poly(diallyldimethylammonium chloride) 27195-16-0, Sucrose distearate 27321-96-6, Polyethylene glycol cholesteryl ether 28228-56-0 28679-24-5, Dodecylbenzyltriethylammonium chloride 28981-97-7, Alprazolam 29094-61-9, Glipizide 29767-20-2, Teniposide 29836-26-8, n-Octyl-β-D-glucopyranoside 31431-39-7, Mebendazole 31566-31-1, Glyceryl monostearate 33419-42-0, Etoposide 34911-55-2, Bupropion 36735-22-5, Quazepam 37318-31-3, Sucrose stearate 38443-60-6, Decyltriethylammonium chloride 39809-25-1, Penciclovir 42399-41-7, Diltiazem 51264-14-3, Amsacrine 51569-39-2, Olin 10G 52128-35-5, Trimetrexate 52467-63-7, Tricetylmethylammonium chloride 55008-57-6 55268-75-2, Cefuroxime 55348-40-8, Triton X-200 58846-77-8, n-Decyl β-D-glucopyranoside 59080-45-4, n-Hexyl β-D-glucopyranoside 59122-55-3, n-DoDecyl β-D-glucopyranoside 59277-89-3, Acyclovir 65271-80-9, Mitoxantrone 65277-42-1, Ketoconazole 66085-59-4, Nimodipine 69227-93-6, n-DoDecyl β-D-maltoside 69984-73-2, n-Nonyl β-D-glucopyranoside 70458-96-7, Norfloxacin 72509-76-3, Felodipine 72558-82-8, Ceftazidime 72559-06-9, Rifabutin 73590-58-6, Omeprazole 76095-16-4, Enalapril maleate 76420-72-9, Enalaprilat 76824-35-6, Famotidine 78617-12-6, n-Heptyl β-D-glucopyranoside 79617-96-2, Sertraline 79794-75-5, Loratadine 81098-60-4, Cisapride 81103-11-9, Clarithromycin 81409-90-7, Cabergoline 81859-24-7, Polyquat 10 82494-09-5, n-Decyl β-D-maltoside 84449-90-1, Raloxifene 85261-19-4, Nonanoyl-N-methylglucamide 85261-20-7, Decanoyl-N-methylglucamide 85316-98-9 85618-20-8, n-Heptyl β-D-thioglucopyranoside 85618-21-9, n-Octyl-β-D-thioglucopyranoside 85721-33-1, Ciprofloxacin 86386-73-4, Fluconazole 87679-37-6, Trandolapril 91161-71-6, Terbinafine 95233-18-4, Atovaquone 97322-87-7, Troglitazone 100286-97-3, Milrinone lactate 101397-87-9, D-Glucitol, 1-deoxy-1-[methyl(1-oxoheptyl)amino]- 103577-45-3, Lansoprazole 104987-11-3, Tacrolimus 106266-06-2, Risperidone 106392-12-5, Pluronic 107397-59-1, Tetronic 150R8 110617-70-4, Poloxamine 113665-84-2, Clopidogrel 115956-12-2, Dolasetron 127666-00-6 127779-20-8, Saquinavir 132539-06-1, Olanzapine 136817-59-9, Delavirdine 138402-11-6, Irbesartan 139481-59-7, Candesartan 139755-83-2, Sildenafil 144034-80-0, Rizatriptan 145599-86-6, Cerivastatin 147059-72-1, Trovafloxacin 159989-65-8, Nelfinavir mesylate 283158-20-3 329326-68-3, p-Isononylphenoxypolyglycidol 503178-50-5 608094-65-1, PEG-vitamin A 630400-66-7 630400-67-8 634601-99-3
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liquid dosage compns. of stable nanoparticulate drugs)

IT **73-31-4, Melatonin**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liquid dosage compns. of stable nanoparticulate drugs)

RN 73-31-4 HCAPLUS
CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 6 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:835860 HCAPLUS Full-text
DOCUMENT NUMBER: 140:192159
TITLE: On the estimation of binding affinity (ΔGbind) for human P450 substrates (based on Km and KD values)
AUTHOR(S): Lewis, David F. V.
CORPORATE SOURCE: Molecular Toxicology Group, School of Biomedical and Life Sciences, University of Surrey, Surrey, GU2 7XH, UK
SOURCE: Current Drug Metabolism (2003), 4(5), 331-340
CODEN: CDMUBU; ISSN: 1389-2002
PUBLISHER: Bentham Science Publishers Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A straightforward methodol., based on first principles, for the estimation of human cytochrome P 450-substrate binding energies is outlined, and the system has then been applied successfully to a relatively large dataset of P 450 substrates totaling 90 compds. The results of Quant. Structure-Activity Relationship (QSAR) anal. on the same dataset of cytochrome P 450 (CYP) substrates from the CYP1, CYP2, and CYP3 families, involving a total of 90 compds., agree favorably with the original anal. based on first principles, thus confirming the use of average values for hydrogen bond and π-π stacking energies, together with utilizing log P values as an estimation of desolvation energies. This method is based on a linear summation of the various contributary factors to the process, including: desolvation, hydrogen bonding, π-π stacking, restricted bond rotation and other energies relating to loss in translational and rotational energy. It is found that, for the majority of P 450 substrates investigated, the first four terms are required for a relatively good estimation (R = 0.98) of the substrate binding affinity (ΔGbind) towards CYP1 and CYP2 enzymes. Consequently, it would appear that the loss in rotational and translational energy, which is thought to occur on substrate binding, apparently has little effect in most cases, possibly due to some degree of residual motion of the enzyme-substrate complex within the endoplasmic reticulum membrane. However, the appearance of a small constant term in the QSAR equation could possibly relate to an average loss in translational and rotational energy for the 90 compds. studied in this investigation.

IT 50-09-9 50-28-2, Estradiol, biological studies 50-47-5, Desipramine 50-48-6, Amitriptyline 50-49-7, Imipramine 52-53-9, Verapamil 54-11-5, Nicotine 56-23-5, Tetrachloromethane, biological studies 57-41-0, Phenytoin 57-63-6, Ethynylestradiol 58-08-2, Caffeine, biological studies 58-22-0, Testosterone 58-55-9, Theophylline, biological studies 60-80-0, Antipyrine 61-68-7, Mefenamic acid 62-44-2, Phenacetin 62-53-3, Aniline, biological studies 64-77-7, Tolbutamide 68-26-8, Retinol 69-72-7, Salicylic acid, biological studies 72-69-5, Nortriptyline **73-31-4, Melatonin** 76-57-3, Codeine 91-22-5, Quinoline, biological studies 91-64-5, Coumarin 92-67-1, 4-Aminobiphenyl 95-25-0, Chlorzoxazone 95-63-6, 1,2,4-Trimethylbenzene 100-02-7, 4-Nitrophenol, biological studies 100-17-4, 4-Nitroanisole 100-42-5, Styrene, biological studies 103-90-2, Paracetamol 106-42-3, p-Xylene, biological studies 106-99-0, Butadiene, biological studies 114-07-8, Erythromycin 125-71-3, Dextromethorphan 143-07-7, **Lauric** acid, biological studies 151-67-7, Halothane 156-08-1, Benzphetamine 302-79-4, Retinoic acid 439-14-5, Diazepam 486-56-6, Cotinine 500-92-5, Proguanil 506-32-1, Arachidonic acid 525-66-6, Propranolol 680-31-9, Hexamethylphosphoramide, biological studies 1131-64-2, Debrisoquine 1162-65-8, Aflatoxin B1 1951-25-3, Amiodarone 2303-80-2 5543-57-7, S-Warfarin 5543-58-8 5725-89-3, 7-Methoxyresorufin 5725-91-7, 7-Ethoxyresorufin 15307-86-5, Diclofenac 15687-27-1, Ibuprofen 22204-53-1, Naproxen 31005-02-4, 7-Ethoxycoumarin 33069-62-4, Taxol 33419-42-0, Etoposide 34911-55-2, Bupropion 36322-90-4, Piroxicam

40180-04-9, Tienilic acid 43200-80-2, Zopiclone 51333-22-3, Budesonide 54340-62-4, Bufuralol 57303-99-8, Benzo[a]pyrene-7,8-diol 59467-70-8, Midazolam 70374-39-9, Lornoxicam 70989-04-7, S-Mephenytoin 71320-77-9, Moclobemide 73590-58-6, Omeprazole 77094-11-2, MeIQ 87687-02-3, 7-Benzyloxyresorufin 89365-50-4, Salmeterol 94015-46-0, 58C80 99614-02-5, Ondansetron 105650-23-5, PhIP 112856-44-7, Losigamone 114798-26-4, Losartan 115453-82-2 116854-70-7, 4-Chloromethyl 7-ethoxycoumarin 117976-89-3, LY307640 122320-73-4, Rosiglitazone 158511-47-8, SM-12502 663219-56-5, PNU 249173
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PKT (Pharmacokinetics); PRP (Properties); BIOL (Biological study); PROC (Process)
(estimation of binding affinity (ΔGbind) for human P 450 substrates (based on Km and KD values))

IT **73-31-4, Melatonin**
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PKT (Pharmacokinetics); PRP (Properties); BIOL (Biological study); PROC (Process)
(estimation of binding affinity (ΔGbind) for human P 450 substrates (based on Km and KD values))

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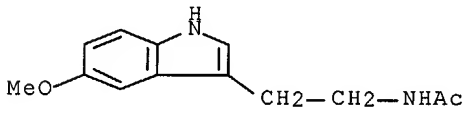


REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 7 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:456850 HCAPLUS Full-text
DOCUMENT NUMBER: 140:133611
TITLE: Novel B **melatonin**-loaded chitosan microcapsules: in vitro characterization and anti-apoptosis efficacy for aflatoxin B1-induced apoptosis in rat liver
AUTHOR(S): El-Gibaly, I.; Meki, A. M. A.; Abdel-Ghaffar, S. K.
CORPORATE SOURCE: Faculty of Pharmacy, Department of Pharmaceutics, Assiut University, Assiut, Egypt
SOURCE: International Journal of Pharmaceutics (2003), 260(1), 5-22
CODEN: IJPHDE; ISSN: 0378-5173
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The aim of this study was to prepare buoyant (B) **melatonin** (MT)-loaded chitosan microcapsules having favorable sustained release characteristics (in simulated gastric fluid (SGF), pH 1.2) in comparison with non-buoyant (NB) chitosan particles. The new buoyant microcapsules were prepared by the ionotropic gelation method using sodium **lauryl** sulfate (NaLS) for coagulation. The microcapsule characteristics were affected by the initial drug and NaLS concns., as well as the presence of sodium dioctyl sulfosuccinate (DOS) or pectin with NaLS in the external phase. In general, spherical microcapsules with 36.90-56.23% encapsulation efficiencies, hollow core and satisfactory release properties were produced. The best sustained release profiles (t50%: 5 h) with near zero-order kinetics were observed with the higher

theor. payload microcapsules prepared with both NaLS and DOS in a 1:2 ratio. In vivo studies were also carried out to exploit the protective effect of the MT-loaded NaLS-DOS microcapsules against aflatoxin B1 (AFB1)-induced toxicity (liver apoptosis) in male rats. The results implied that apoptotic rate was significantly reduced when MT or its microcapsules formulation was co-administered with AFB1. The levels of the oxidative stress indexes (malondialdehyde (MDA), a lipid peroxidn. product and nitric oxide (NO)) in liver tissues were significantly reduced, while the levels of the hepatic antioxidants (glutathione (GSH) and zinc (Zn), as well as the enzyme activities of glutathione reductase (GR), glutathione peroxidase (GSPx) and glutathione-S-transferase (GST)) which act as antiapoptosis were significantly increased as compared to AFB1 group (without MT). MT microcapsules appeared more effective in reduction of apoptotic rate than free MT as indicated by the decline of caspase-3 activities (an apoptotic marker) and confirmed by histopathol.

TI Novel B **melatonin**-loaded chitosan microcapsules: in. . .

AB . . . prepare buoyant (B) **melatonin** (MT)-loaded chitosan microcapsules. . . method using sodium **lauryl** sulfate (NaLS) for. . .

ST **melatonin** chitosan microcapsule

IT Drug delivery systems
(microcapsules, sustained-release; novel B **melatonin**-loaded chitosan microcapsules)

IT Drug delivery systems
(microparticles; novel B **melatonin**-loaded chitosan microcapsules)

IT Dissolution
Liver
Oxidative stress, biological
(novel B **melatonin**-loaded chitosan microcapsules)

IT 542-78-9, Malondialdehyde 9001-48-3, Glutathione reductase 9013-66-5, Glutathione peroxidase 10102-43-9, Nitric oxide, biological studies 50812-37-8, Glutathione S-transferase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(novel B **melatonin**-loaded chitosan microcapsules)

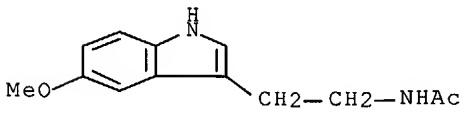
IT 151-21-3, Sodium **lauryl** sulfate, biological studies 577-11-7, Sodium dioctyl sulfosuccinate 9000-69-5, Pectin
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(novel B **melatonin**-loaded chitosan microcapsules)

IT **73-31-4, Melatonin** 9012-76-4, Chitosan
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(novel B **melatonin**-loaded chitosan microcapsules)

IT **73-31-4, Melatonin**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(novel B **melatonin**-loaded chitosan microcapsules)

RN 73-31-4 HCAPLUS

CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 8 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:852350 HCAPLUS Full-text
DOCUMENT NUMBER: 139:73847
TITLE: Skin permeation enhancement effect and skin irritation of saturated fatty alcohols
AUTHOR(S): Kanikkannan, N.; Singh, Mandip
CORPORATE SOURCE: College of Pharmacy and Pharm Science, Florida A and M University, Tallahassee, FL, 32307, USA
SOURCE: International Journal of Pharmaceutics (2002), 248(1-2), 219-228
CODEN: IJPHDE; ISSN: 0378-5173
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Though the skin permeation enhancement effect of chemical penetration enhancers has been studied extensively, their skin irritation potential has not been adequately investigated. The objective of this study was to evaluate the skin permeation enhancement effect and skin irritation of saturated fatty alcs. using **melatonin** as a model compound A saturated solution of **melatonin** in a mixture of water and ethanol (40:60) containing 5% w/v of saturated fatty alc. was used in the skin permeation studies using Franz diffusion cells. For skin irritation studies, 230 µl of fatty alc. solution was applied on the dorsal surface of the hairless rats using Hill top chamber. The skin irritation was evaluated by visual scoring method and bioengineering methods such as measurement of transepidermal water loss (TEWL) and skin blood flow. The flux of **melatonin** across hairless rat skin was found to be dependent on the carbon chain length of the fatty alcs., with decanol showing the maximum permeation of **melatonin**. All fatty alcs. increased the TEWL and skin blood flow significantly compared with the vehicle. The fatty alcs. (decanol, undecanol and **lauryl** alc.), which showed greater permeation of **melatonin**, also produced greater TEWL, skin blood flow and erythema. Tridecanol and myristyl alc. showed lower permeation enhancement effect but caused greater skin irritation. Octanol and nonanol may be the most useful enhancers for the transdermal delivery of **melatonin** considering their lower skin irritation and a reasonably good permeation enhancement effect. However, further studies are needed to ascertain their safety as skin penetration enhancers. Skin permeation and skin irritation in exptl. animals such as rats are generally higher compared with human skin. Further studies in human volunteers using fatty alcs. at the concns. of 5% or lower may provide useful information on the utility of these fatty alcs. as permeation enhancers.

AB . . . fatty alcs. using **melatonin** as a model. . . saturated solution of **melatonin** in a mixture. . . The flux of **melatonin** across hairless rat. . . maximum permeation of **melatonin**. All fatty alcs.. . . (decanol, undecanol and **lauryl** alc.), which showed. . . greater permeation of **melatonin**, also produced greater. . . transdermal delivery of **melatonin** considering their lower. . .

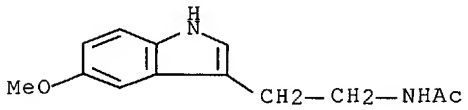
ST . . . skin permeation enhancer **melatonin**

IT **73-31-4, Melatonin**
RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(model drug; skin permeation enhancement effect and skin irritation of saturated fatty alcs.)

IT 111-87-5, Octanol, biological studies 112-30-1, Decanol 112-42-5, Undecanol 112-53-8, **Lauryl** alcohol 112-72-1, Myristyl alcohol 143-08-8, Nonanol 26248-42-0, Tridecanol
RL: ADV (Adverse effect, including toxicity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(skin permeation enhancement effect and skin irritation of saturated fatty alcs.)

IT **73-31-4, Melatonin**
RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(model drug; skin permeation enhancement effect and skin irritation of saturated fatty alcs.)

RN 73-31-4 HCAPLUS
CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



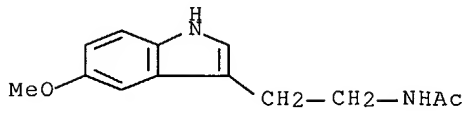
REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 9 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:797650 HCAPLUS Full-text
DOCUMENT NUMBER: 138:390754
TITLE: Formulation and evaluation of **melatonin** plasters
AUTHOR(S): Gwak, Hye Sun; Kim, Seung Ung; Chun, In Koo
CORPORATE SOURCE: College of Pharmacy, Dongduk Women's University, Seoul, 136-714, S. Korea
SOURCE: Yakche Hakhoechi (2002), 32(2), 107-112
CODEN: YAHAEX; ISSN: 0259-2347
PUBLISHER: Korean Society of Pharmaceutics
DOCUMENT TYPE: Journal
LANGUAGE: Korean

AB To investigate the feasibility of developing a novel **melatonin** plaster, the effects of vehicles and drug loading dose on the in vitro permeation of **melatonin** across dorsal hairless mouse skin from pressure-sensitive adhesive (PSA) matrixes were examined Vehicles employed were propylene glycol **laurate** (PGL), propylene glycol monocaprylate (PGMC) and diethylene glycol monoethyl ether (DGME). Among PSAs used, only Duro-Tak 87-2196 showed a good peeling property. The release from Duro-Tak 87-2196 was proportional to the square root of time, and dose-dependent. The fluxes increased as the loading dose increased over the doses under solubility The relatively high permeation flux (3.03±1.37 μg/cm2/h) was obtained when using PGMC at the **melatonin** loading dose of 45 mg/140 cm2. Lag time was not affected by the vehicles used but by the thickness spread. The **melatonin** plasters prepared using PGMC showed a good adhesive property onto skin, and showed no crystal formation.

TI . . . and evaluation of **melatonin** plasters
AB . . . developing a novel **melatonin** plaster, the effects. . . vitro permeation of **melatonin** across dorsal hairless. . . were propylene glycol **laurate** (PGL), propylene glycol. . . PGMC at the **melatonin** loading dose of. . . thickness spread. The **melatonin** plasters prepared using. . .
ST **melatonin** plaster adhesive bioavailability
IT Drug bioavailability
(formulations and evaluation of **melatonin** plasters)
IT Medical goods
(plasters; formulations and evaluation of **melatonin** plasters)
IT Drug delivery systems
(tapes; formulations and evaluation of **melatonin** plasters)
IT **73-31-4, Melatonin** 111-90-0, Diethylene glycol monoethyl ether 31565-12-5, Propylene glycol monocaprylate 37321-62-3, Propylene glycol **laurate** 222726-11-6, Duro-Tak 87-2196
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(formulations and evaluation of **melatonin** plasters)
IT **73-31-4, Melatonin**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(formulations and evaluation of **melatonin** plasters)
RN 73-31-4 HCAPLUS

CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



L22 ANSWER 10 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:738571 HCAPLUS Full-text
DOCUMENT NUMBER: 138:390707
TITLE: Effect of vehicles on the transdermal delivery of **melatonin** across porcine skin in vitro
AUTHOR(S): Kikwai, L.; Kanikkannan, N.; Babu, R. J.; Singh, Mandip
CORPORATE SOURCE: College of Pharmacy and Pharmaceutical Sciences, Florida A and M University, Tallahassee, FL, 32307, USA
SOURCE: Journal of Controlled Release (2002), 83(2), 307-311
CODEN: JCREEC; ISSN: 0168-3659
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB **Melatonin** is a good candidate for transdermal drug delivery considering its variable oral absorption, a short biol. half-life and extensive first pass metabolism The purpose of this study was to investigate the effect of various vehicles on the in vitro permeation of **melatonin** across porcine skin. The skin permeation studies were carried out with vertical diffusion cells using dermatomed porcine skin. The flux of **melatonin** from iso-Pr myristate, **Lauroglycol** FCC and ethanol were resp. 1.5, 1.4 and 1.3 times higher than that observed with water ($P<0.001$). However, flux values of **melatonin** with Labrasol, propylene glycol and mineral oil were significantly lower than that of water ($P<0.001$). There was no significant difference between the flux of **melatonin** from the following vehicles: Transcutol, Phosal 50 PG, Et oleate, PEG 400 and water ($F=0.2082$, $P>0.05$). In general, vehicles with high **melatonin** solubility showed low permeability coefficient values. The flux had no correlation to the solubility data, suggesting that high solubility values do not translate to high drug permeation. The present study suggests that iso-Pr myristate, **Lauroglycol** FCC and ethanol may be used as potential vehicles in the transdermal delivery of **melatonin**.

TI . . . transdermal delivery of **melatonin** across porcine skin.
. .

AB **Melatonin** is a good. . . vitro permeation of **melatonin** across porcine skin.. . . The flux of **melatonin** from iso-Pr myristate, **Lauroglycol** FCC and ethanol. . . flux values of **melatonin** with Labrasol, propylene. . . the flux of **melatonin** from the following. . . vehicles with high **melatonin** solubility showed low. . . that iso-Pr myristate, **Lauroglycol** FCC and ethanol. . . transdermal delivery of **melatonin**.

ST **melatonin** transdermal permeation

IT Glycerides, biological studies
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(C8-10, ethoxylated; effect of vehicles on transdermal delivery of **melatonin** across porcine skin)

IT Bioavailability
Partition
Skin
(effect of vehicles on transdermal delivery of **melatonin**

across porcine skin)

IT Paraffin oils
Polyoxyalkylenes, biological studies
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effect of vehicles on transdermal delivery of **melatonin** across porcine skin)

IT Biological transport
(permeation; effect of vehicles on transdermal delivery of **melatonin** across porcine skin)

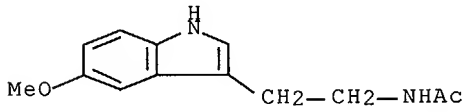
IT Drug delivery systems
(transdermal; effect of vehicles on transdermal delivery of **melatonin** across porcine skin)

IT 57-55-6, Propylene glycol, biological studies 64-17-5, Ethanol, biological studies 110-27-0, Iso-propyl myristate 111-62-6, Ethyl oleate 111-90-0, Transcutol 25322-68-3, PEG 400 37321-62-3, **Lauroglycol** FCC 214840-93-4, Phosal 50PG
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effect of vehicles on transdermal delivery of **melatonin** across porcine skin)

IT **73-31-4, Melatonin**
RL: PKT (Pharmacokinetics); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effect of vehicles on transdermal delivery of **melatonin** across porcine skin)

IT **73-31-4, Melatonin**
RL: PKT (Pharmacokinetics); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effect of vehicles on transdermal delivery of **melatonin** across porcine skin)

RN 73-31-4 HCAPLUS
CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 11 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:637534 HCAPLUS Full-text
DOCUMENT NUMBER: 137:190733
TITLE: Hydrogen peroxide-containing compositions for removal of acrochordon
INVENTOR(S): Miller, Mickey; Ancira, Margaret
PATENT ASSIGNEE(S): Physician's Choice of Arizona, Inc., USA
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2002064151	A1	20020822	WO 2002-US3530	20020208
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1365781	A1	20031203	EP 2002-720927	20020208
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004518715	T2	20040624	JP 2002-563944	20020208
BR 2002007163	A	20040629	BR 2002-7163	20020208
PRIORITY APPLN. INFO.:			US 2001-267978P	P 20010209
			WO 2002-US3530	W 20020208

AB The subject of the present invention is acrochordon removal and prevention utilizing safe dependable effective biocompatible treatments with no scarring, bleeding, twisting, yanking, choking, burning, freezing, shocking, screaming and hypo pigmentation or hyper pigmentation. Methods for acrochordon removal comprise application of high concns. of hydrogen peroxide (at least 23%). The composition further comprises a vitamin, an amino acid, a melanin inhibitor, an organic acid, a hormone, a sulfoxide, an alc., a fatty acid, a polyol, an amide, a surfactant, a terpene, etc. For example, the composition comprises 35% hydrogen peroxide, 0.5% L-ascorbic acid, 0.5% niacin, 0.5% glycine, 0.5% hydroquinone, 0.5% superoxide dismutase, 5% galacturonic acid, and 14% ethanol.

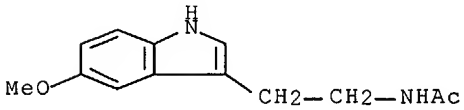
IT 50-21-5, Lactic acid, biological studies 50-81-7, L-Ascorbic acid, biological studies 52-90-4, L-Cysteine, biological studies 53-43-0, Dehydroepiandrosterone 53-86-1, Indomethacin 56-40-6, Glycine, biological studies 56-41-7, L-Alanine, biological studies 56-45-1, L-Serine, biological studies 56-81-5, Glycerol, biological studies 56-85-9, L-Glutamine, biological studies 56-87-1, L-Lysine, biological studies 56-89-3, L-Cystine, biological studies 57-09-0, Cetyltrimethylammonium bromide 57-11-4, Stearic acid, biological studies 57-13-6, Urea, biological studies 57-55-6, Propylene glycol, biological studies 57-83-0, Progesterone, biological studies 58-22-0, Testosterone 59-43-8, Thiamin, biological studies 59-67-6, Niacin, biological studies 60-18-4, L-Tyrosine, biological studies 60-33-3, Linoleic acid, biological studies 61-90-5, L-Leucine, biological studies 63-68-3, L-Methionine, biological studies 63-91-2, L-Phenylalanine, biological studies 64-17-5, Ethanol, biological studies 67-68-5, Dimethyl sulfoxide, biological studies 68-12-2, Dimethylformamide, biological studies 69-72-7, Salicylic acid, biological studies 69-72-7D, Salicylic acid, alkyl derivs. 70-26-8, L-Ornithine 70-47-3, L-Asparagine, biological studies 71-00-1, L-Histidine, biological studies 71-23-8, Propanol, biological studies 71-36-3, Butanol, biological studies 71-41-0, Pentanol, biological studies 72-18-4, L-Valine, biological studies 72-19-5, L-Threonine, biological studies 73-22-3, L-Tryptophan, biological studies **73-31-4, Melatonin** 73-32-5, L-Isoleucine, biological studies 74-79-3, L-Arginine, biological studies 77-92-9, Citric acid, biological studies 78-92-2, 2-Butanol 79-09-4, Propionic acid, biological studies 79-14-1, Glycolic acid, biological studies 79-20-9, Methyl acetate 80-56-8, α-Pinene 80-69-3, Tartronic acid 83-88-5, Riboflavin, biological studies 87-69-4, Tartaric acid, biological studies 87-73-0, Saccharic acid 89-65-6 89-80-5, Menthone 89-81-6, Piperitone 89-82-7, Pulegone 90-64-2, Mandelic acid 98-55-5, α-Terpineol

98-92-0, Niacinamide 99-48-9, Carveol 99-49-0, Carvone 100-51-6, Benzyl alcohol, biological studies 102-71-6, Triethanolamine, biological studies 107-21-1, Ethylene glycol, biological studies 108-95-2, Phenol, biological studies 109-52-4, Valeric acid, biological studies 110-15-6, Succinic acid, biological studies 110-27-0, Isopropyl myristate 110-40-7, Diethyl sebacate 111-14-8, Heptanoic acid 111-27-3, Hexanol, biological studies 111-42-2, **Diethanolamine**, biological studies 111-46-6, Diethylene glycol, biological studies 111-62-6, Ethyl oleate 111-65-9, N-Octane, biological studies 111-84-2, N-Nonane 111-87-5, Octanol, biological studies 112-00-5, Dodecyltrimethylammonium chloride 112-02-7, Hexadecyltrimethylammonium chloride 112-03-8, Octadecyltrimethylammonium chloride 112-05-0, Pelargonic acid 112-27-6, Triethylene glycol 112-30-1, Decanol 112-40-3, N-Dodecane 112-80-1, Oleic acid, biological studies 123-03-5, Cetylpyridinium chloride 123-31-9, Hydroquinone, biological studies 123-31-9D, Hydroquinone, glycosides 123-86-4, Butyl acetate 124-07-2, Caprylic acid, biological studies 124-18-5, N-Decane 127-17-3, Pyruvic acid, biological studies 127-19-5, Dimethylacetamide 134-62-3, Diethyltoluamide 141-78-6, Ethyl acetate, biological studies 142-62-1, Caproic acid, biological studies 142-82-5, N-Heptane, biological studies 142-91-6, Isopropyl palmitate 143-07-7, **Lauric** acid, biological studies 143-08-8, Nonanol 145-13-1, Pregnenolone 145-42-6, Sodium taurocholate 147-85-3, L-Proline, biological studies 151-21-3, Sodium **lauryl** sulfate, biological studies 156-06-9, β-Phenylpyruvic acid 285-67-6, Cyclopentene oxide 286-20-4, Cyclohexene oxide 288-47-1D, Thiazole, derivs. 302-95-4, Sodium desoxycholate 305-84-0, L-Carnosine 320-77-4, Isocitric acid 331-39-5, Caffeic acid 334-48-5, Capric acid 361-09-1, Sodium cholate 433-48-7, β-Fluoropyruvic acid 461-72-3, Hydantoin 470-82-6, 1,8-Cineole 473-81-4, Glyceric acid 476-66-4, Ellagic acid 491-38-3D, Chromone, derivs. 497-76-7, Arbutin 501-30-4, Kojic acid 501-30-4D, Kojic acid, glycosides 501-30-4D, Kojic acid, succinimide ester 515-30-0, Atrolactic acid 526-95-4, Gluconic acid 526-99-8, Mucic acid 541-15-1, L-Carnitine 544-63-8, Myristic acid, biological studies 544-76-3, N-Hexadecane 554-12-1, Methyl propionate 554-60-9, β-Carene 562-74-3, Terpinen-4-ol 594-61-6, 2-Hydroxyisobutyric acid 600-15-7, α-Hydroxybutyric acid 621-82-9, Cinnamic acid, biological studies 624-24-8, Methyl valerate 629-25-4, Sodium **laurate** 629-50-5, N-Tridecane 629-59-4, N-Tetradecane 636-58-8 685-73-4, Galacturonic acid 828-01-3, β-Phenyllactic acid 863-57-0, Sodium glycocholate 1118-92-9 1119-97-7, Tetradecyltrimethylammonium bromide 1120-21-4, N-Undecane 1182-34-9, Dicaffeoylquinic acid 1190-94-9, L-5-Hydroxylysine 1195-92-2, Limonene oxide 1197-18-8, Tranexamic acid 1338-39-2, Span 20 1338-41-6, Span 60 1338-43-8, Span 80 1405-86-3, Glycyrrhizic acid 1686-14-2, α-Pinene oxide 2424-71-7, Methacin 2782-86-7, Heptonic acid 3079-28-5, Decyl methyl sulfoxide 3402-98-0, Iduronic acid 5699-58-1, Acetylpyruvic acid 5989-27-5, D-Limonene 6032-29-7, 2-Pentanol 6556-12-3, Glucuronic acid 6703-05-5, Lyxaric acid 6814-36-4, Mannuronic acid 6915-15-7, Malic acid 7704-34-9, Sulfur, biological studies 7722-84-1, Hydrogen peroxide, biological studies 9002-72-6, Somatotropin 9002-92-0, Brij 30 9004-98-2, Brij 93 9004-99-3, Myrj 45 9012-76-4, Chitosan 9054-89-1, Superoxide dismutase 9083-38-9, Melanostatin 10158-64-2, Xylaric acid 10191-35-2 12001-79-5, Vitamin K 14433-76-2 15769-56-9, Guluronic acid 18494-60-5 23351-51-1, Glucoheptonic acid 25138-66-3, S-Lactoyl glutathione 25265-71-8, Dipropylene glycol 25322-68-3, Polyethylene glycol 26266-57-9, Span 40 27025-41-8, Oxidized glutathione 28223-51-0, Alluronic acid 28223-52-1, Taluronic acid 30923-19-4, Lyxuronic acid 30923-20-7, Riburonic acid 30923-21-8, Xyluronic acid

30923-39-8, Arabinuronic acid 36413-60-2, Quinic acid 37299-36-8, Lavanol 66664-08-2, Pentahydroxyhexanoic acid 77466-09-2, Miglyol 840 83826-43-1, Octyldodecyl myristate 84710-55-4, Threuric acid 84710-56-5, Erythreuric acid 84710-57-6, Altruronic acid 86632-03-3 106392-12-5, Poloxamer 153976-68-2
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydrogen peroxide-containing compns. for removal of acrochordon)

IT **73-31-4, Melatonin**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydrogen peroxide-containing compns. for removal of acrochordon)

RN 73-31-4 HCAPLUS
CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 12 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:523338 HCAPLUS Full-text
DOCUMENT NUMBER: 138:243040
TITLE: Effect of vehicles and enhancers on the in vitro permeation of **melatonin** through hairless mouse skin
AUTHOR(S): Gwak, Hye Sun; Kim, Seung Ung; Chun, In Koo
CORPORATE SOURCE: Laboratory of Pharmaceutics, College of Pharmacy, Dongduk Women's University, Seoul, 136-714, S. Korea
SOURCE: Archives of Pharmacal Research (2002), 25(3), 392-396
CODEN: APHRDQ; ISSN: 0253-6269
PUBLISHER: Pharmaceutical Society of Korea
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The effects of vehicles and penetration enhancers on the in vitro permeation of **melatonin** through dorsal hairless mouse skin were investigated. Propylene glycol **laurate** (PGL), iso-Pr myristate (IPM), propylene glycol monolaurate (PGML) and propylene glycol monocaprylate (PGMC) showed high permeation fluxes and PGL, PGML and PGMC decreased lag time significantly. In both of the binary co-solvents of diethylene glycol monoethyl ether (DGME)-PGL and DGME-IPM, the highest fluxes were achieved at 20% of DGME, which were 10.5±1.5 and 9.1±2.4 μg/cm2/h, resp. Among fatty acids used as a permeation enhancer, capric acid and oleic acid in DGME-PGL (80: 20 volume/volume) showed relatively high enhancing effects. Capric acid also shortened the lag time of **melatonin** from 2.4±0.7 to 1.3±0.2 h. Oleic acid, however, failed to shorten the lag time. Therefore, for effective solution formulations in terms of permeation flux and lag time, capric acid-containing DGME-PGL (80: 20 volume/volume) could be used to enhance the skin permeation of **melatonin**.

TI . . . vitro permeation of **melatonin** through hairless mouse.
. .

AB . . . vitro permeation of **melatonin** through dorsal hairless. . . investigated. Propylene glycol **laurate** (PGL), iso-Pr myristate. . . lag time of **melatonin** from 2.4±0.7 to. . . skin permeation of **melatonin**.

ST . . . enhancer skin permeation; **melatonin** skin enhancer solvent

IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(C8-10, esters with propylene glycol; effect of vehicles and enhancers on in vitro permeation of **melatonin** through hairless mouse skin)

IT Glycerides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(C8-10; effect of vehicles and enhancers on in vitro permeation of **melatonin** through hairless mouse skin)

IT Solvents
(cosolvents; effect of vehicles and enhancers on in vitro permeation of **melatonin** through hairless mouse skin)

IT Drug bioavailability
Skin
Solvents
(effect of vehicles and enhancers on in vitro permeation of **melatonin** through hairless mouse skin)

IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effect of vehicles and enhancers on in vitro permeation of **melatonin** through hairless mouse skin)

IT Biological transport
(permeation; effect of vehicles and enhancers on in vitro permeation of **melatonin** through hairless mouse skin)

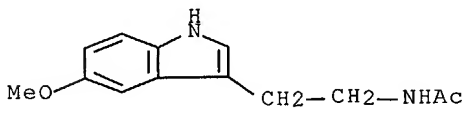
IT Drug delivery systems
(transdermal; effect of vehicles and enhancers on in vitro permeation of **melatonin** through hairless mouse skin)

IT **73-31-4, Melatonin**
RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effect of vehicles and enhancers on in vitro permeation of **melatonin** through hairless mouse skin)

IT 57-55-6, Propylene glycol, biological studies 60-33-3, Linoleic acid, biological studies 110-27-0, Isopropyl myristate 112-80-1, Oleic acid, biological studies 124-07-2, Caprylic acid, biological studies 143-07-7, **Lauric** acid, biological studies 143-28-2, Oleyl alcohol 334-48-5, Capric acid 27194-74-7, Propylene glycol monolaurate 31565-12-5, Propylene glycol monocaprylate 37321-62-3, Propylene glycol **laurate** 87090-08-2, Labrafil M 1944 244070-52-8, Labrafil WL 2609
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effect of vehicles and enhancers on in vitro permeation of **melatonin** through hairless mouse skin)

IT **73-31-4, Melatonin**
RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effect of vehicles and enhancers on in vitro permeation of **melatonin** through hairless mouse skin)

RN 73-31-4 HCAPLUS
CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

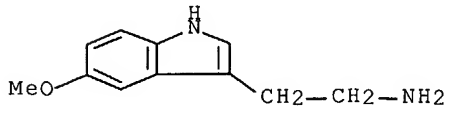
L22 ANSWER 13 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:225916 HCAPLUS Full-text
DOCUMENT NUMBER: 136:380279
TITLE: High-affinity interactions of ligands at recombinant Guinea pig 5HT7 receptors
AUTHOR(S): Wilcox, R. E.; Ragan, J. E.; Pearlman, R. S.; Brusniak, M. Y.-K.; Eglen, R. M.; Bonhaus, D. W.; Tenner, T. E., Jr.; Miller, J. D.
CORPORATE SOURCE: College of Pharmacy, University of Texas at Austin, Austin, TX, 78712, USA
SOURCE: Journal of Computer-Aided Molecular Design (2001), 15(10), 883-909
CODEN: JCADEQ; ISSN: 0920-654X
PUBLISHER: Kluwer Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The serotonin 5HT7 receptor has been implicated in numerous physiol. and pathol. processes from circadian rhythms to depression and schizophrenia. Clonal cell lines heterologously expressing recombinant receptors offer good models for understanding drug-receptor interactions and development of quant. structure-activity relationships (QSAR). Comparative Mol. Field Anal. (CoMFA) is an important modern QSAR procedure that relates the steric and electrostatic fields of a set of aligned compds. to affinity. Here, we utilized CoMFA to predict affinity for a number of high-affinity ligands at the recombinant guinea pig 5HT7 receptor. Using R-lisuride as the template, a final CoMFA model was derived using procedures similar to those of our recent papers. The final cross-validated model accounted for >85% of the variance in the compound affinity data, while the final non-cross validated model accounted for >99% of the variance. Model evaluation was done using cross-validation methods with groups of 5 ligands. Twenty cross-validation runs yielded an average predictive r2(q2) of 0.779 ± 0.015 (range: 0.669-0.867). Furthermore, 3D-chemical database search queries derived from the model yielded hit lists of promising agents with high structural similarity to the template. Together, these results suggest a possible basis for high-affinity drug action at 5HT7 receptors.

IT 50-67-9, Serotonin, biological studies 58-00-4 113-15-5, Ergotamine 298-45-3, (+)-Bulbocapnine **608-07-1, 5-Methoxytryptamine** 1491-59-4, Oxymetazoline 5890-18-6, **Laurolitsine** 18016-80-3, Lisuride 18426-20-5 25614-03-3, Bromocriptine 37686-84-3, Terguride 60634-51-7, LY 53857 74885-09-9, 5-Carboxamidotryptamine 80300-09-0 108674-86-8, Sergolexole 121588-75-8, Amesergide 137328-52-0, LY 215840
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(high-affinity interactions of ligands at recombinant guinea pig 5HT7 receptors)

IT **608-07-1, 5-Methoxytryptamine**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(high-affinity interactions of ligands at recombinant guinea pig 5HT7 receptors)

RN 608-07-1 HCAPLUS
CN 1H-Indole-3-ethanamine, 5-methoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 14 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:10238 HCAPLUS Full-text
DOCUMENT NUMBER: 136:74316
TITLE: Cosmetic compositions containing keratinization modulators and methods for improving keratinous surfaces
INVENTOR(S): Poret, Jacques Louis
PATENT ASSIGNEE(S): Revlon Consumer Products Corp., USA
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002000176	A1	20020103	WO 2001-US19489	20010615
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002034524	A1	20020321	US 2001-879708	20010612
US 2004022822	A1	20040205	US 2003-628050	20030728
PRIORITY APPLN. INFO.:			US 2000-212269P P	20000619
			US 2001-879708 B1	20010612

AB A method is described for treating human keratinous surfaces to ameliorate the adverse effects of aging and environment thereon by modulating keratinization of superficial epithelial cells forming the keratinous surfaces. The method comprises contacting the keratinous surfaces with a lipophilic compound (a **methoxytryptamine** derivative) in a cosmetic carrier. An skin cleanser composition contained preservatives 0.30, decyl glucoside 2.40, disodium **lauroamphodiacetate**/sodium trideceth sulfate/hexylene glycol/isopropanol 12.00, fragrance 0.40, Polyquaternium-10 0.06, Polyquaternium-7 3.00, diazolidinylurea 0.20, propylene glycol 0.10, palmitoylmethoxytryptamine 1.00, and water qs to 100%.

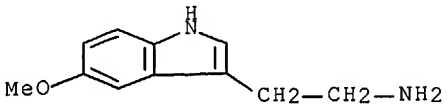
AB . . . lipophilic compound (a **methoxytryptamine** derivative) in a. . . glucoside 2.40, disodium **lauroamphodiacetate**/sodium trideceth sulfate/hexylene glycol/isopropanol. . .

ST cosmetic keratinization modulator **methoxytryptamine**; hair conditioner **methoxytryptamine**

IT **608-07-1D, Methoxytryptamine**, derivs. 31692-79-2, Dimethiconol 142957-69-5 151922-15-5 199526-49-3 199679-71-5D, neutralized
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(cosmetic compns. containing keratinization modulators and methods for improving keratinous surfaces)

IT **608-07-1D, Methoxytryptamine**, derivs.
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(cosmetic compns. containing keratinization modulators and methods for improving keratinous surfaces)

RN 608-07-1 HCAPLUS
CN 1H-Indole-3-ethanamine, 5-methoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 15 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:788212 HCAPLUS Full-text
DOCUMENT NUMBER: 137:129707
TITLE: Comparison of the effect of fatty alcohols on the permeation of **melatonin** between porcine and human skin
AUTHOR(S): Andega, S.; Kanikkannan, N.; Singh, M.
CORPORATE SOURCE: College of Pharmacy, Division of Pharmaceutics, Florida A&M University, Tallahassee, FL, 32307, USA
SOURCE: Journal of Controlled Release (2001), 77(1-2), 17-25
CODEN: JCREEC; ISSN: 0168-3659
PUBLISHER: Elsevier Science Ireland Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB **Melatonin** (MT) is a hormone secreted by the pineal gland that plays an important role in the regulation of the circadian sleep-wake cycle. It would be advantageous to administer MT using a transdermal delivery system for the treatment of sleep disorders such as delayed sleep syndrome, jet lag in travelers, cosmonauts and shift workers. The porcine skin has been found to have similar morphol. and functional characteristics as human skin. The elastic fibers in the dermis, enzyme pattern of the epidermis, epidermal tissue turnover time, keratinous proteins and thickness of epidermis of porcine skin are similar to human skin. However, the fat deposition and vascularisation of the cutaneous glands of porcine skin are different from human skin. In addition, porcine skin has been found to have a close permeability character to human skin. However, the comparative effect of chemical penetration enhancers on the permeation of drugs between porcine and human skin has not been reported. The purpose of this study was to compare the effect of fatty alcs. on the permeability of porcine and human skin using MT as a model compound The effect of saturated fatty alcs. (octanol, nonanol, decanol, undecanol, **lauryl** alc., tridecanol, myristyl alc.) and unsatd. fatty alcs. (oleyl alc., linoleyl alc., linolenyl alc.) at 5% concentration was tested across dermatomed porcine and human skin. These studies showed a parabolic relationship between the carbon chain length of saturated fatty alcs. and permeation enhancement of MT with both porcine and human skin. Maximum permeation of MT was observed when fatty alc. carbon chain length was 10. In general, as the level of unsatn. increased from 1 to 2 double bonds, there was an increase in the permeation of MT both in porcine and human skin. However, a decrease in the permeation was observed with 3 double bonds. Regression anal. using the steady state flux data showed a significant pos. correlation between porcine and human skin for saturated fatty alcs. However, though a pos. correlation was observed between the porcine and human skin, the correlation was statistically insignificant. The static diffusion cell system employed in this study has major artifact compared to a flow through system. Thus, the permeability of porcine skin to MT in the presence of saturated and unsatd. fatty alcs. was qual. similar to human skin but quant. different with some fatty alcs.

TI . . . the permeation of **melatonin** between porcine and. . .
AB **Melatonin** (MT) is a. . . nonanol, decanol, undecanol, **lauryl** alc., tridecanol, myristyl. . .
ST fatty alc permeation **melatonin** skin
IT Drug bioavailability
Human

Permeation enhancers
Regression analysis
Skin
Sus scrofa domestica
(fatty alcs. effect on permeation of **melatonin** between porcine and human skin)

IT Alcohols, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fatty, saturated; fatty alcs. effect on permeation of **melatonin** between porcine and human skin)

IT Alcohols, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fatty, unsatd.; fatty alcs. effect on permeation of **melatonin** between porcine and human skin)

IT Biological transport
(permeation; fatty alcs. effect on permeation of **melatonin** between porcine and human skin)

IT Structure-activity relationship
(skin-penetrating, permeation-enhancing; fatty alcs. effect on permeation of **melatonin** between porcine and human skin)

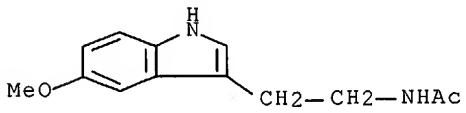
IT Drug delivery systems
(transdermal; fatty alcs. effect on permeation of **melatonin** between porcine and human skin)

IT **73-31-4, Melatonin**
RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fatty alcs. effect on permeation of **melatonin** between porcine and human skin)

IT 111-87-5, Octanol, biological studies 112-30-1, Decanol 112-42-5, Undecanol 112-53-8, **Lauryl** alcohol 112-70-9, 1-Tridecanol 112-72-1, Myristyl alcohol 143-08-8, Nonanol 143-28-2, Oleyl alcohol 506-43-4, Linoleyl alcohol 506-44-5, Linolenyl alcohol
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fatty alcs. effect on permeation of **melatonin** between porcine and human skin)

IT **73-31-4, Melatonin**
RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fatty alcs. effect on permeation of **melatonin** between porcine and human skin)

RN 73-31-4 HCAPLUS
CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 16 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:380340 HCAPLUS Full-text
DOCUMENT NUMBER: 135:9993
TITLE: Transdermal delivery system for alkaloids of Aconitum species
INVENTOR(S): Xiong, Weihong; Patel, Dinesh C.

PATENT ASSIGNEE(S): Xel Herbaceuticals, USA
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001035883	A1	20010525	WO 2000-US31821	20001117

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-166497P P 19991119
US 2000-249380P P 20001116

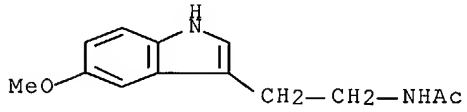
AB The present invention provides a composition of transdermally administered aconitine alkaloids for ameliorating pain and inflammation. In one aspect, an aconitine alkaloid is delivered in a sufficient amount to achieve and maintain a blood plasma aconitine alkaloid level of about 0.5 ng/mL to about 400 ng/mL. Aconitine alkaloids may be delivered by themselves, or in combination with other elements, such as addnl. analgesics, other drugs, or pos. health promoting substances. Various formulations for the transdermal delivery of aconitine alkaloids are disclosed, and may include selected penetration enhancers. Thus, a cream contained aconitine 0.01-40, stearic acid 0.1-30, stearyl alc. 0.1-10, cetyl alc. 0.1-10, glycerin 1-30, methylparaben 0.01-2, propylparaben 0.01-2, KOH 0.01-3, and water 40-95%.

IT 50-21-5D, Lactic acid, esters 50-33-9, Phenylbutazone, biological studies 50-53-3, biological studies 50-78-2, Aspirin 51-34-3, Scopolamine 51-55-8, Atropine, biological studies 53-86-1, Indomethacin 57-11-4, Stearic acid, biological studies 57-27-2, Morphine, biological studies 57-42-1, Meperidine 58-38-8, Prochlorperazine 58-39-9, Perphenazine 60-87-7, Promethazine 60-99-1, Methotrimeprazine 61-68-7, Mefenamic acid 63-12-7, Benzquinamide 64-95-9, Adiphenine 68-88-2, Hydroxyzine 69-72-7, Salicylic acid, biological studies 69-72-7D, Salicylic acid, salts **73-31-4**, **Melatonin** 76-41-5, Oxymorphone 76-42-6, Oxycodone 76-57-3, Codeine 76-58-4, Ethylmorphine 76-99-3, Methadone 77-07-6, Levorphanol 77-19-0, Dicyclomine 79-14-1D, Glycolic acid, esters 83-98-7, Orphenadrine 103-90-2, Acetaminophen 112-53-8, **Lauryl** alcohol 112-92-5, Stearyl alcohol 115-53-7, Sinomenine 129-49-7, Methysergide maleate 146-54-3, Triflupromazine 298-50-0, Propantheline 302-27-2, Aconitine 359-83-1, Pentazocine 364-62-5, Metoclopramide 379-79-3, Ergotamine tartrate 404-86-4, Capsaicin 427-00-9, Desomorphine 437-38-7, Fentanyl 466-97-7, Normorphine 466-99-9, Hydromorphone 467-85-6, Normethadone 517-66-8, Dicentrine 596-51-0, Glycopyrrolate 604-51-3, Deptropine 972-02-1, Diphenidol 1120-16-7, **Lauramide** 1135-24-6, Ferulic acid 1244-76-4 1406-18-4, vitamin E 1420-55-9, Thiethylperazine 1477-40-3, Levomethadyl acetate 2934-97-6, Tetrahydropalmatine 3416-24-8, Glucosamine 4205-90-7, Clonidine 5104-49-4, Flurbiprofen 5633-20-5, Oxybutynin 6190-39-2, Dihydroergotamine mesylate 6385-02-0, Meclofenamate sodium 7020-55-5, Clidinium 14051-33-3, Benzetimide 14297-87-1, Benzylmorphine 15307-86-5, Diclofenac 15518-72-6, Diponium 15687-27-1, Ibuprofen 18917-89-0, Magnesium salicylate 20594-83-6, Nalbuphine 21256-18-8, Oxaprozin 22071-15-4, Ketoprofen 22204-53-1,

Naproxen 22494-42-4, Diflunisal 25333-49-7, Anisotropine 25496-72-4, Glyceryl monooleate 26171-23-3, Tolmetin 27203-92-5, Tramadol 33005-95-7, Tiaprofenic acid 34597-40-5, Fenoprofen calcium 36322-90-4, Piroxicam 36653-82-4, Cetyl alcohol 38194-50-2, Sulindac 41340-25-4, Etodolac 42408-82-2, Butorphanol 42461-84-7, Flunixin meglumine 42924-53-8, Nabumetone 51931-66-9, Tilidine 52485-79-7, Buprenorphine 52646-92-1, Anisodine 53648-55-8, Dezocine 53716-49-7, Carprofen 55837-18-8, Butibufen 55869-99-3, Anisodamine 56030-54-7, Sufentanil 71195-58-9, Alfentanil 72522-13-5, Eptazocine 74103-07-4, Ketorolac tromethamine 103628-46-2, Sumatriptan 121679-13-8, Naratriptan 132875-61-7, Remifentanil 139264-17-8, Zolmitriptan 144034-80-0, Rizatriptan 162011-90-7, Rofecoxib 169590-42-5, Celecoxib
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(transdermal delivery system for alkaloids of Aconitum species)

IT **73-31-4, Melatonin**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(transdermal delivery system for alkaloids of Aconitum species)

RN 73-31-4 HCAPLUS
CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 17 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:89142 HCAPLUS Full-text
DOCUMENT NUMBER: 134:285547
TITLE: Effects of vehicles and enhancers on transdermal delivery of **melatonin**
AUTHOR(S): Oh, H.-J.; Oh, Y.-K.; Kim, C.-K.
CORPORATE SOURCE: College of Pharmacy, National Research Laboratory for Bioactives Delivery System, Seoul National University, Kwanak-Ku, Seoul, 151-742, S. Korea
SOURCE: International Journal of Pharmaceutics (2001), 212(1), 63-71
CODEN: IJPHDE; ISSN: 0378-5173
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB For a more effective transdermal delivery of **melatonin** (MT), the effects of vehicles and enhancers on its skin permeation and lag time were evaluated. Skin permeation study was conducted in Franz diffusion cells by using excised hairless mouse skins. MT was analyzed by HPLC. As vehicles, EtOH, PEG-400, or propylene glycol (PG) was used alone or mixed with a phosphate buffer. Binary vehicles (EtOH/buffer, PEG/buffer, PG/buffer) showed different effects on the skin permeation of MT and its lag time. Compared with the buffer alone, the PEG/buffer shortened the lag time of MT but reduced its skin permeation. EtOH/buffer significantly increased the flux of MT but prolonged the lag time with the content of EtOH. PG/buffer did not affect the lag time but slightly increased the skin permeation of MT at the higher content of PG (≥80%). The composition of vehicles exerts significant influence but it per se might have limitation in modulating the transdermal delivery of MT. Next, one tested whether fatty acids could more effectively enhance the skin permeation of MT and shorten its lag time. Given the influence of vehicles on both permeation and

lag time, PG was used as a vehicle for fatty acids. The permeation-enhancing effects of saturated fatty acids increased in the following order: C10>C12>C14>C16>C18. The saturated fatty acid, however, did not significantly shorten the lag time regardless of the carbon chain length. Meanwhile, similar to saturated **lauric** acid (C12), unsatd. oleic acid (C18) dramatically enhanced the skin permeability coefficient of MT more than 950-fold over the effect of PG alone. Moreover, oleic acid showed the shortest lag time (2.1 h). Oleic acid in a suitable vehicle could more effectively enhance the skin permeation of MT and shorten its lag time than did the vehicles of various compns.

TI . . . transdermal delivery of **melatonin**

AB . . . transdermal delivery of **melatonin** (MT), the effects. . . similar to saturated **lauric** acid (C12), unsatd.. . .

ST transdermal delivery **melatonin** vehicle enhancer; fatty. . . acid transdermal delivery **melatonin** permeation; alc transdermal delivery **melatonin** permeation

IT Biological transport
(permeation; vehicles and enhancers effect on transdermal delivery of **melatonin**)

IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(saturated; vehicles and enhancers effect on transdermal delivery of **melatonin**)

IT Buffers
Permeation enhancers
Skin
(vehicles and enhancers effect on transdermal delivery of **melatonin**)

IT Polyoxyalkylenes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vehicles and enhancers effect on transdermal delivery of **melatonin**)

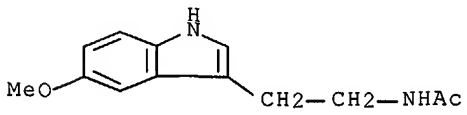
IT **73-31-4, Melatonin**
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(vehicles and enhancers effect on transdermal delivery of **melatonin**)

IT 57-10-3, Palmitic acid, biological studies 57-11-4, Stearic acid, biological studies 57-55-6, Propylene glycol, biological studies 64-17-5, Ethanol, biological studies 112-80-1, Oleic acid, biological studies 143-07-7, **Lauric** acid, biological studies 334-48-5, Capric acid 544-63-8, Myristic acid, biological studies 25322-68-3, Polyethylene glycol
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vehicles and enhancers effect on transdermal delivery of **melatonin**)

IT **73-31-4, Melatonin**
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(vehicles and enhancers effect on transdermal delivery of **melatonin**)

RN 73-31-4 HCAPLUS

CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 18 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:553395 HCAPLUS Full-text
DOCUMENT NUMBER: 133:155456
TITLE: Topical sprays containing film-forming polymers
INVENTOR(S): Lulla, Amar; Malhotra, Geena; Raut, Preeti
PATENT ASSIGNEE(S): Cipla Limited, India
SOURCE: PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000045795	A2	20000810	WO 2000-GB366	20000207
WO 2000045795	A3	20010809		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
IN 186668	A	20011020	IN 1999-BO93	19990205
CA 2359640	AA	20000810	CA 2000-2359640	20000207
AU 2000024472	A5	20000825	AU 2000-24472	20000207
AU 759515	B2	20030417		
BR 2000007997	A	20011030	BR 2000-7997	20000207
EP 1150661	A2	20011107	EP 2000-902727	20000207
EP 1150661	B1	20031022		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002536319	T2	20021029	JP 2000-596915	20000207
NZ 513208	A	20030530	NZ 2000-513208	20000207
AT 252380	E	20031115	AT 2000-902727	20000207
PT 1150661	T	20040227	PT 2000-902727	20000207
ES 2209812	T3	20040701	ES 2000-902727	20000207
ZA 2000005727	A	20001221	ZA 2000-5727	20001017
NO 2001003815	A	20011002	NO 2001-3815	20010803
HK 1042043	A1	20040408	HK 2002-103295	20020502
US 2004213744	A1	20041028	US 2003-686517	20031016

PRIORITY APPLN. INFO.:		
IN 1999-BO92	A	19990205
IN 1999-BO93	A	19990205
IN 1999-BO382	A	19990520
IN 1999-BO582	A	19990817
WO 1999-GB2998	W	19990909
IN 2000-BO43	A	20000113
IN 2000-BO44	A	20000113
WO 2000-GB366	W	20000207
US 2000-503843	A1	20000215

AB A topical, medicinal spray composition comprises one or more medicaments in a volatile vehicle, and one or more film-forming polymers. When sprayed on a topical site, the composition forms a stable, breathable film from which the medicaments are transdermally available. Preferably, the composition comprises 0.1-30 % of one or

more medicaments, 0.1-15 % film-forming polymers, 0.1-10 % solubilizers, 0.1-8 % permeation enhancers, 1.0-10 % plasticizers, and a vehicle q.s. 100 %. The invention includes a spray dispenser containing the topical composition An aerosol contained estradiol 2, PVP K-30 6, vinylacetate-vinylpyrrolidone copolymer 4, vitamin E 1, polyethylene glycol-6000 2, polyethylene glycol 3, dichlorodifluoromethane 24.9, and trichloromonofluoromethane 57.1 %.

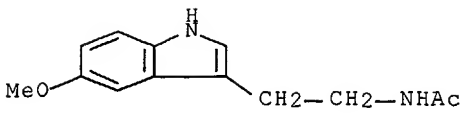
IT 57-55-6, Propylene glycol, biological studies 108-32-7, Propylene carbonate 151-21-3, Sodium **lauryl** sulfate, biological studies 1406-18-4, Vitamin E 9002-96-4, TPGS 25322-68-3, Polyethylene glycol
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(solubilizer; topical sprays containing film-forming polymers)

IT 50-02-2, Dexamethasone 50-23-7, Hydrocortisone 50-28-2, Estradiol, biological studies 50-47-5, Desipramine 50-49-7, Imipramine 51-34-3, Scopolamine 51-55-8, Atropine, biological studies 52-53-9, Verapamil 53-86-1, Indomethacin 54-11-5, Nicotine 55-63-0, Nitroglycerin 57-83-0, Progesterone, biological studies 58-22-0, Testosterone 67-73-2, Fluocinolone acetonide 68-22-4, Norethisterone **73-31-4**, **Melatonin** 77-86-1, Tromethamine 87-33-2, Isosorbide dinitrate 101-31-5, Hyoscyamine 144-11-6, Trihexyphenidyl 318-98-9, Propranolol hydrochloride 378-44-9, Betamethasone 439-14-5, Diazepam 537-46-2, Methamphetamine 745-65-3, Alprostadil 846-49-1, Lorazepam 1622-61-3, Clonazepam 2609-46-3, Amiloride 2809-21-4, Etidronic acid 4205-90-7, Clonidine 5534-09-8, Beclomethasone dipropionate 5633-20-5, Oxybutynin 9002-72-6, Growth hormone 9002-89-5, Polyvinyl alcohol 9003-20-7, Polyvinyl acetate 9003-39-8, Povidone 9004-10-8, Insulin, biological studies 9004-35-7, Cellulose acetate 9004-57-3, Ethyl cellulose 9004-62-0, Hydroxyethyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 10238-21-8, Glyburide 11000-17-2, Vasopressin 14611-51-9, Selegiline 15307-79-6, Diclofenac sodium 15687-27-1, Ibuprofen 15826-37-6, Sodium cromoglycate 18559-94-9, Salbutamol 19216-56-9, Prazosin 22071-15-4, Ketoprofen 24938-16-7, Eudragit E100 25086-89-9, Vinylacetate-vinylpyrrolidone copolymer 25608-33-7, Butyl methacrylate-methyl methacrylate copolymer 25614-03-3, Bromocriptine 26159-34-2, Naproxen sodium 26921-17-5, Timolol maleate 29094-61-9, Glipizide 36322-90-4, Piroxicam 40391-99-9, Pamidronic acid 51333-22-3, Budesonide 51803-78-2, Nimesulide 53179-11-6, Loperamide 54910-89-3, Fluoxetine 59122-46-2, Misoprostol 61869-08-7, Paroxetine 62571-86-2, Captopril 63590-64-7, Terazosin 66376-36-1, Alendronic acid 72509-76-3, Felodipine 74103-06-3, Ketorolac 74191-85-8, Doxazosin 74381-53-6, Leuprolide acetate 76547-98-3, Lisinopril 76932-56-4, Nafarelin 80474-14-2, Fluticasone propionate 81409-90-7, Cabergoline 81732-65-2, Bambuterol 83919-23-7, Mometasone furoate 84485-00-7, Sibutramine hydrochloride 87679-37-6, Trandolapril 88150-42-9, Amlodipine 89699-18-3, Isoprenaline sulfate 93479-97-1, Glimepiride 94749-08-3, Salmeterol xinafoate 98319-26-7, Finasteride 103628-46-2, Sumatriptan 106133-20-4, Tamsulosin 115103-54-3, Tiagabine 121679-13-8, Naratriptan 122320-73-4, Rosiglitazone 129318-43-0, Alendronate sodium 139264-17-8, Zolmitriptan 139755-83-2, Sildenafil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(topical sprays containing film-forming polymers)

IT **73-31-4**, **Melatonin**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(topical sprays containing film-forming polymers)

RN 73-31-4 HCAPLUS

CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



L22 ANSWER 19 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:209857 HCAPLUS Full-text
DOCUMENT NUMBER: 132:241718
TITLE: Composition and method for whitening teeth without damaging soft tissue
INVENTOR(S): McLaughlin, Gerald G.
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000016737	A1	20000330	WO 1999-US21371	19990917
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9962518	A1	20000410	AU 1999-62518	19990917
PRIORITY APPLN. INFO.:			US 1998-100779P	P 19980918
			WO 1999-US21371	W 19990917

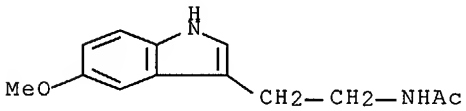
AB A composition is provided for whitening a tooth in a dental arch, including at least 30 % of potassium hydrogen peroxymonopersulfate (2KHSO5.KHSO4.K2SO4) in a slurry or in a dry form, wherein the composition does not cause damage visible to the naked eye to a soft tissue during a treatment period. A composition is also provided for whitening a tooth including at least 30 % of potassium hydrogen peroxymonopersulfate (2KHSO5.KHSO4.K2SO4) in a slurry or dry form, wherein the composition does not include a peroxide bleaching agent. In another embodiment, a method is provided for whitening a tooth in a dental arch. The method includes (1) contacting the dental arch with a composition comprising at least 30 % of potassium hydrogen peroxymonopersulfate sulfate (2KHSO5.KHSO4.K2SO4) in a slurry or in an aqueous solution, wherein the pH of the composition is adjusted from about pH 5.0 to about pH 8.5, and wherein the contacting does not cause damage visible to the naked eye to a soft tissue of the dental arch during a treatment period; and (2) removing the composition from the dental arch. The method also includes contacting the tooth with a composition including a peroxide bleaching agent, wherein the agent generates hydrogen peroxide as 15 % or less of the composition; and removing the composition including a peroxide bleaching agent. A kit is also provided for whitening teeth including a carrier means being compartmentalized to receive in close confinement therein one or more containers including a first container containing potassium hydrogen peroxymonopersulfate sulfate (2KHSO5.KHSO4.K2SO4) and an agent to adjust the pH from about 5.0 to about 8.5.

IT 50-81-7, L-Ascorbic acid, biological studies 56-81-5, 1,2,3-Propanetriol, biological studies 57-55-6, 1,2-Propanediol,

biological studies **73-31-4** 77-92-9, biological studies 94-36-0, Benzoyl peroxide, biological studies 124-43-6, Carbamide peroxide 150-13-0, p-Aminobenzoic acid 151-21-3, Sodium **lauryl** sulfate, biological studies 546-93-0, Magnesium carbonate 1305-62-0, Calcium hydroxide, biological studies 1533-45-5 3811-04-9, Potassium chlorate 4680-78-8, Guinea green 7128-64-5, Uvitex-OB 7235-40-7, β-Carotene 7601-54-9, Trisodium phosphate 7631-86-9, Silica, biological studies 7632-04-4, Sodium perborate 7646-93-7, Potassium bisulfate 7681-49-4, Sodium fluoride, biological studies 7722-84-1, Hydrogen peroxide, biological studies 7727-54-0, Ammonium persulfate 7757-79-1, Potassium nitrate, biological studies 7778-80-5, Potassium sulfate, biological studies 9000-01-5, Arabic gum 9003-04-7 9004-32-4, Carboxymethyl cellulose 9004-62-0, Hydroxyethyl cellulose 9005-64-5, Tween 20 10361-76-9, Potassium peroxymonosulfate 10476-85-4, Strontium chloride 13463-67-7, Titania, biological studies 15630-89-4, Sodium percarbonate 16470-24-9 25155-30-0, Sodium dodecyl benzene sulfonate 25608-12-2, Potassium polyacrylate 28831-12-1, Sodium persulfate 55001-87-1 106392-12-5, Pluronic 127 187820-94-6, Surfynol 485W
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(tooth-whitening compns. containing potassium peroxymonopersulfate and beaching agents and activity enhancers)

IT **73-31-4**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(tooth-whitening compns. containing potassium peroxymonopersulfate and beaching agents and activity enhancers)

RN 73-31-4 HCAPLUS
CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 20 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:526130 HCAPLUS Full-text
DOCUMENT NUMBER: 131:291163
TITLE: Effect of fatty acids on the permeation of **melatonin** across rat and pig skin in-vitro and on the transepidermal water loss in rats in-vivo
AUTHOR(S): Kandimalla, K.; Kanikkannan, N.; Andega, S.; Singh, M.
CORPORATE SOURCE: College of Pharmacy, Florida A and M University, Tallahassee, FL, 32307, USA
SOURCE: Journal of Pharmacy and Pharmacology (1999), 51(7), 783-790
CODEN: JPPMAB; ISSN: 0022-3573
PUBLISHER: Royal Pharmaceutical Society of Great Britain
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Transdermal delivery of **melatonin** would be advantageous in the treatment of sleep disorders considering the short biol. half-life of **melatonin** and its variable bioavailability via the oral route. This study looked at suitable penetration

enhancers for the transdermal permeation of **melatonin**. The permeation of **melatonin** was enhanced by all saturated and unsatd. fatty acids across both rat and porcine skin. There was a parabolic relationship between the carbon chain length of saturated fatty acids and the enhancement of **melatonin** permeation across rat and porcine skin. For rat skin, the maximum flux was observed with undecanoic acid (45.33 μg cm-2h-1) which enhanced the flux of **melatonin** 8.6-fold compared with the control, whereas **lauric** acid produced the maximum flux of **melatonin** (24.98 μg cm-2h-1; 4.7-fold) across porcine skin. An increase in the number of double bonds in cis-9-octadecanoic acid increased the flux of **melatonin** across rat skin. In contrast, with porcine skin, the flux of **melatonin** decreased as the number of double bonds increased, although the flux values were not statistically significant. Treatment of rats with undecanoic acid, oleic acid and linolenic acid for 3 h using Hill top chamber enhanced the transepidermal water loss significantly. The maximum transepidermal water loss was observed with undecanoic acid and linolenic acid among saturated and unsatd. fatty acids, resp. Nonanoic acid and myristic acid did not cause a significant change in the transepidermal water loss. The enhancement effect of saturated fatty acids on the permeation of **melatonin** was dependent on the chain-length of the fatty acid in both rat and porcine skin. While an increase in the number of double bonds in the fatty acid increased the flux of **melatonin** in rat skin, no significant difference in the flux was observed with porcine skin. The permeation enhancement of **melatonin** by saturated and unsatd. fatty acids across rat skin was significantly higher than that of porcine skin. A pos. correlation was observed between the permeation enhancement effect of the fatty acids across rat skin in-vitro and the transepidermal water loss in rats in-vivo, suggesting that there is a similarity in the mechanism by which fatty acids enhance the permeation of **melatonin** and in the enhancement of transepidermal water loss. Thus, saturated fatty acids such as undecanoic acid or **lauric** acid which showed maximum permeation across rat and porcine skin, resp., may be used as potential penetration enhancers in the development of a transdermal delivery system for **melatonin**.

TI . . . the permeation of **melatonin** across rat and. . .

AB Transdermal delivery of **melatonin** would be advantageous. . . biol. half-life of **melatonin** and its variable. . . transdermal permeation of **melatonin**. The permeation of **melatonin** was enhanced by. . . the enhancement of **melatonin** permeation across rat. . . the flux of **melatonin** 8.6-fold compared with. . . the control, whereas **lauric** acid produced the. . . maximum flux of **melatonin** (24.98 μg cm-2h-1;. . . the flux of **melatonin** across rat skin.. . . the flux of **melatonin** decreased as the. . . the permeation of **melatonin** was dependent on. . . the flux of **melatonin** in rat skin,. . . permeation enhancement of **melatonin** by saturated and. . . the permeation of **melatonin** and in the. . . undecanoic acid or **lauric** acid which showed. . . delivery system for **melatonin**.

ST . . . acid permeation skin **melatonin**; transepidermal water loss permeation **melatonin** fatty acid

IT Skin
(epidermis; fatty acids effect on permeation of **melatonin** across skin and on transepidermal water loss)

IT Permeation enhancers
Skin
(fatty acids effect on permeation of **melatonin** across skin and on transepidermal water loss)

IT Biological transport
(permeation; fatty acids effect on permeation of **melatonin** across skin and on transepidermal water loss)

IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(saturated; fatty acids effect on permeation of **melatonin** across skin and on transepidermal water loss)

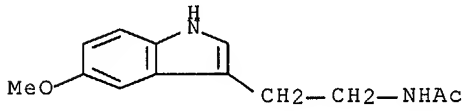
IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(unsatd.; fatty acids effect on permeation of **melatonin** across skin and on transepidermal water loss)

IT **73-31-4, Melatonin**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(fatty acids effect on permeation of **melatonin** across skin and on transepidermal water loss)

IT 60-33-3, 9,12-Octadecadienoic acid (9Z,12Z)-, biological studies 112-05-0, Nonanoic acid 112-37-8, Undecanoic acid 112-80-1, 9-Octadecenoic acid (9Z)-, biological studies 143-07-7, **Lauric** acid, biological studies 334-48-5, Decanoic acid 463-40-1, Linolenic acid 544-63-8, Myristic acid, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fatty acids effect on permeation of **melatonin** across skin and on transepidermal water loss)

IT **73-31-4, Melatonin**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(fatty acids effect on permeation of **melatonin** across skin and on transepidermal water loss)

RN 73-31-4 HCAPLUS
CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 21 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:315678 HCAPLUS Full-text
DOCUMENT NUMBER: 131:83075
TITLE: Improved enzyme immunoassay method for **melatonin**: application to the determination of serum **melatonin** in rats, sheep, and humans
AUTHOR(S): Shavali, Shaik; Samejima, Michikazu; Uchida, Katsuhisa; Morita, Yukitomo; Fukuda, Atsuo
CORPORATE SOURCE: Department of Physiology, Hamamatsu University School of Medicine, Shizuoka, 431-3192, Japan
SOURCE: Clinical Chemistry (Washington, D. C.) (1999), 45(5), 690-692
CODEN: CLCHAU; ISSN: 0009-9147
PUBLISHER: American Association for Clinical Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The authors modified the solid-phase EIA for serum **melatonin** described by Yie, et al. (ibid., 1993, 39, 2322-5) in several ways, including coating the **melatonin** antibody to the polystyrene wells by incubating the antibody in a carbonate-bicarbonate buffer at 30° for 6 h, by omitting the incubation with sucrose solution, and by developing the color by incubating the wells with substrate solution (containing p-nitrophenyl phosphate in a **diethanolamine** buffer at pH 9.8) at 37° for 8-10 h. **Melatonin**-Na p-carboxybenzylalkaline phosphatase was the nonisotopic label used in both methods. These modifications decreased the assay time to 30 h. The lowest detectable amount of **melatonin** by the improved EIA method was 0.8 pg/well. The intra- and interassay CVs for low and medium **melatonin** concns. in rat, sheep,

and human serum exts. were 6.5-18%. The mean recoveries for 6.3, 12.5, 25.0, 50.0, and 100.0 pg of **melatonin** added to rat, sheep, and human serum exts. were 112.8, 122.6, and 108.5%, resp. Results compared favorably with those obtained by RIA.

TI . . . immunoassay method for **melatonin**: application to the. . . determination of serum **melatonin** in rats, sheep,. . .

AB . . . EIA for serum **melatonin** described by Yie,. . . including coating the **melatonin** antibody to the. . . phosphate in a **diethanolamine** buffer at pH. . . for 8-10 h. **Melatonin**-Na p-carboxybenzylalkaline phosphatase was. . . detectable amount of **melatonin** by the improved. . . low and medium **melatonin** concns. in rat,. . . 100.0 pg of **melatonin** added to rat,. . .

ST enzyme immunoassay **melatonin** blood

IT Blood analysis
(enzyme immunoassay for determination of serum **melatonin** in rats and sheep and humans)

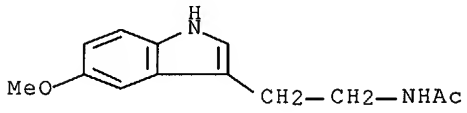
IT Immunoassay
(enzyme; enzyme immunoassay for determination of serum **melatonin** in rats and sheep and humans)

IT **73-31-4, Melatonin**
RL: ANT (Analyte); ANST (Analytical study)
(enzyme immunoassay for determination of serum **melatonin** in rats and sheep and humans)

IT **73-31-4, Melatonin**
RL: ANT (Analyte); ANST (Analytical study)
(enzyme immunoassay for determination of serum **melatonin** in rats and sheep and humans)

RN 73-31-4 HCAPLUS

CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 22 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:287252 HCAPLUS Full-text

DOCUMENT NUMBER: 131:68347

TITLE: Phototoxicity of **melatonin**

AUTHOR(S): Kim, Young-Ok; Chung, Hye Joo; Chung, Seung-Tae; Kim, Jin-ho; Park, Jae-Hyun; Kil, Kwang-Sup; Cho, Dae-Hyun

CORPORATE SOURCE: Department of Toxicology, National Institute of Toxicological Research, KFDA, Seoul, 122-704, S. Korea

SOURCE: Archives of Pharmacal Research (1999), 22(2), 143-150
CODEN: APHRDQ; ISSN: 0253-6269

PUBLISHER: Pharmaceutical Society of Korea

DOCUMENT TYPE: Journal

LANGUAGE: English

AB **Melatonin** (MLT) is mainly secreted by the pineal gland. The UV, IR and 1H-NMR spectra of irradiated and non-irradiated MLT were measured, and phototoxicity tests of MLT, anthracene (pos. control) and sodium **lauryl** sulfate (SLS, neg. control) were performed. The methods employed include both in vitro tests such as MTS assay using the human fibroblast cell and yeast growth inhibition assay using Candida albicans and in vivo method using the skin of guinea pig. UV absorption spectra and 1H-NMR spectra of MLT were changed by UVA (365 nm, 15 J/cm2), but IR spectra of MLT were not changed. The 50% inhibitory concentration (IC50) ratio (UV-/UV+) of MLT was 10.

The inhibition zone of irradiated-paper disks treated with MLT was not observed According to the results of histopathol. examination, no pathol. lesion was observed in the non-irradiated group, but slight degeneration of keratinocytes in the epidermis, hemorrhage and vasodilation in dermis were observed in the irradiated group. These results indicate that the mol. structure of MLT is altered by UVA to unidentified photoproducts and a moderate phototoxicity of MLT is predicted.

TI Phototoxicity of **melatonin**

AB **Melatonin** (MLT) is mainly. . . control) and sodium **lauryl** sulfate (SLS, neg.. . .

ST phototoxicity **melatonin**

IT Skin
(keratinocyte; phototoxicity of **melatonin**)

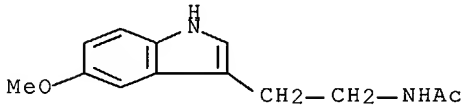
IT Phototoxicity
Skin
UV A radiation
Vasodilation
(phototoxicity of **melatonin**)

IT **73-31-4, Melatonin**
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(phototoxicity of **melatonin**)

IT **73-31-4, Melatonin**
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(phototoxicity of **melatonin**)

RN 73-31-4 HCAPLUS

CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 23 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:246449 HCAPLUS Full-text

DOCUMENT NUMBER: 131:68341

TITLE: The study on skin permeation of **melatonin**

AUTHOR(S): Hao, Jinsong; Zhu, He; Zheng, Junmin

CORPORATE SOURCE: Department of Pharmacy, Shenyang Pharmaceutical University, Shenyang, 110015, Peop. Rep. China

SOURCE: Journal of Chinese Pharmaceutical Sciences (1999), 8(1), 34-38
CODEN: JCHSE4; ISSN: 1003-1057

PUBLISHER: Beijing Medical University, School of Pharmaceutical Sciences

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The permeation of **melatonin** (MT) through the full-thickness mouse skin treated with penetration enhancers such as **laurocapram** (AZ), oleic acid (OA) and propylene glycol (PG), and/or iontophoresis under the condition with Ag/AgCl or Pt electrode at a c.d. of 0.19 mA/Cm2, frequency of 2000 Hz and on/off ratio of 1:1 was conducted. MT as an unionized lipophilic drug could permeate through full-thickness mouse skin, whose steady-state flux and permeation coefficient were 1.622 + 10-3 μg/Cm2·s and 0.888 + 10-6 cm/s, resp. Penetration enhancers including 100%AZ, 5%AZ/PG and 10%OA/PG increased the steady-state flux of MT to 7.61, 7.03 and 2.98 times compared with that through untreated skin, resp. The flux of MT was enhanced by current

application with Ag electrode with an enhancement factor of 2.19. These results showed that penetration enhancer AZ, OA and/or iontophoresis could enhance the skin permeation of MT.

TI . . . skin permeation of **melatonin**

AB The permeation of **melatonin** (MT) through the. . . enhancers such as **laurocapram** (AZ), oleic acid. . .

ST **melatonin** skin permeation penetration. . .

IT Biological transport
(diffusion; **melatonin** permeation using penetration enhancers and iontophoresis in mouse skin)

IT Absorption
Electroosmosis
Iontophoresis
Permeation enhancers
Skin
(**melatonin** permeation using penetration enhancers and iontophoresis in mouse skin)

IT Biological transport
(permeation; **melatonin** permeation using penetration enhancers and iontophoresis in mouse skin)

IT Drug delivery systems
(transdermal; **melatonin** permeation using penetration enhancers and iontophoresis in mouse skin)

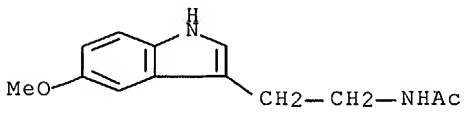
IT 57-55-6, 1,2-Propanediol, biological studies 112-80-1, 9-Octadecenoic acid (9Z)-, biological studies 59227-89-3, **Laurocapram**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(**melatonin** permeation using penetration enhancers and iontophoresis in mouse skin)

IT **73-31-4, Melatonin**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(**melatonin** permeation using penetration enhancers and iontophoresis in mouse skin)

IT **73-31-4, Melatonin**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(**melatonin** permeation using penetration enhancers and iontophoresis in mouse skin)

RN 73-31-4 HCAPLUS

CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 24 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:481955 HCAPLUS Full-text
DOCUMENT NUMBER: 129:250060
TITLE: Penetration of **melatonin** through rat skin using fatty acids as enhancers
AUTHOR(S): Kandimalla, K.; Singh, M.
CORPORATE SOURCE: College of Pharmacy and Pharmaceutical Sciences,

Florida A and M University, Tallahassee, FL, 32307, USA
SOURCE: Proceedings of the International Symposium on Controlled Release of Bioactive Materials (1998), 25th, 603-604
CODEN: PCRMEY; ISSN: 1022-0178
PUBLISHER: Controlled Release Society, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The enhancement effects of fatty acids on the penetration of **melatonin** through rat skin are structure dependent. Polyunsatd. fatty acids enhanced the penetration of **melatonin** through rat skin more than that of the monounsatd. acids.

TI Penetration of **melatonin** through rat skin. . .

AB . . . the penetration of **melatonin** through rat skin. . . the penetration of **melatonin** through rat skin. . .

ST **melatonin** skin penetration fatty. . .

IT Fatty acids, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(monounsatd.; penetration of **melatonin** through skin using fatty acids as enhancers)

IT Permeation enhancers
Skin
(penetration of **melatonin** through skin using fatty acids as enhancers)

IT Fatty acids, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(penetration of **melatonin** through skin using fatty acids as enhancers)

IT Fatty acids, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(polyunsatd.; penetration of **melatonin** through skin using fatty acids as enhancers)

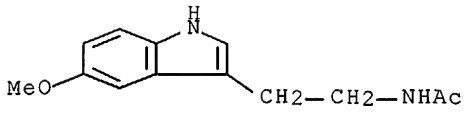
IT Fatty acids, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(saturated; penetration of **melatonin** through skin using fatty acids as enhancers)

IT 60-33-3, Linoleic acid, biological studies **73-31-4, Melatonin** 112-05-0, Nonanoic acid 112-37-8, UnDecanoic acid 112-80-1, Oleic acid, biological studies 143-07-7, **Lauric** acid, biological studies 334-48-5, Decanoic acid 463-40-1, Linolenic acid 544-63-8, Myristic acid, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(penetration of **melatonin** through skin using fatty acids as enhancers)

IT **73-31-4, Melatonin**
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(penetration of **melatonin** through skin using fatty acids as enhancers)

RN 73-31-4 HCAPLUS

CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 25 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1997:276777 HCAPLUS Full-text
DOCUMENT NUMBER: 126:320918
TITLE: Cosmetic compositions containing N-acyl-ethylene-triacetic acids for promotion of skin exfoliation
INVENTOR(S): Ptchelintsev, Dmitri
PATENT ASSIGNEE(S): Avon Products, Inc., USA
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5621008	A	19970415	US 1995-549419	19951027
US 5728733	A	19980317	US 1996-762716	19961210
PRIORITY APPLN. INFO.:			US 1995-549419	19951027

OTHER SOURCE(S): MARPAT 126:320918

AB Disclosed is the novel use of N-acyl-N,N',N'-ethylenediaminetriacetic acids and N-acyl-N,N',N'-(ethylenedioxy) diethylenedinitrilotriacetic acids as active ingredients in preventative as well as therapeutic topical compns. to promote exfoliation and alleviate symptoms of skin conditions caused by abnormal keratinization. Efficacy of a 0.2% hydroalc. solution of N-**lauroyl**-N,N',N''-ethylenediaminetriacetic acid in exfoliation of skin was shown in human volunteers. A lotion contained sodium N-acyl-N,N',N'-ethylenediaminetriacetic 1.0, glycerin 5.0, ammonium hydroxide 2.5, thickener 0.5, octylmethoxycinnamate 2.0, polyoxyethylene stearate 3.5, alc. 10.0, fragrance 10.0, water q.s. 100%.

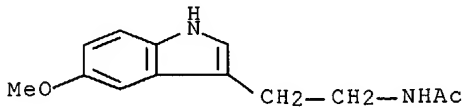
AB . . . hydroalc. solution of N-**lauroyl**-N,N',N''- ethylenediaminetriacetic acid in exfoliation. . .

IT 50-23-7, Hydrocortisone 50-27-1, Estriol 50-28-2, Estradiol, biological studies 50-81-7, Vitamin c, biological studies 58-95-7, Tocopheryl acetate 60-54-8, Tetracycline 68-26-8, Retinol 69-72-7, Salicylic acid, biological studies **73-31-4, Melatonin** 79-81-2, Retinyl palmitate 94-36-0, Benzoyl peroxide, biological studies 96-26-4, Dihydroxyacetone 106-51-4, 2,5-Cyclohexadiene-1,4-dione, biological studies 114-07-8, Erythromycin 137-58-6, Lidocaine 302-79-4, Retinoic acid 501-30-4, Kojic acid 688-57-3D, N-acyl derivs. 1406-18-4, Vitamin e 2398-96-1, Tolnaftate 11111-12-9, Cephalosporin 12001-79-5, Vitamin k 22916-47-8, Miconazole 23593-75-1, Clotrimazole 65277-42-1, Ketoconazole 65472-88-0, Naftifine 102641-08-7, Bth 148124-42-9
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(cosmetic compns. containing acylethylenetriacetic acids for promotion of skin exfoliation)

IT **73-31-4, Melatonin**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(cosmetic compns. containing acylethylenetriacetic acids for promotion of skin exfoliation)

RN 73-31-4 HCAPLUS
CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)



L22 ANSWER 26 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:446732 HCAPLUS Full-text
DOCUMENT NUMBER: 125:96100
TITLE: Monofunctional and/or polyfunctional polylysine conjugates for treatment of neural disorders, autoimmune diseases, and proliferative diseases
INVENTOR(S): Geffard, Michel
PATENT ASSIGNEE(S): Fr.
SOURCE: PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

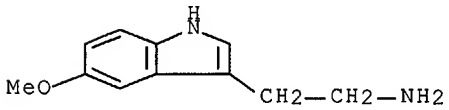
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9615810	A1	19960530	WO 1995-FR1517	19951117
W: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
FR 2727117	A1	19960524	FR 1994-13861	19941118
FR 2727117	B1	19970221		
CA 2205557	AA	19960530	CA 1995-2205557	19951117
AU 9641811	A1	19960617	AU 1996-41811	19951117
EP 792167	A1	19970903	EP 1995-940329	19951117
EP 792167	B1	20010627		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 10511643	T2	19981110	JP 1995-516622	19951117
AT 202487	E	20010715	AT 1995-940329	19951117
ES 2161915	T3	20011216	ES 1995-940329	19951117
PT 792167	T	20011228	PT 1995-940329	19951117
US 6114388	A	20000905	US 1997-836199	19970709
GR 3036710	T3	20011231	GR 2001-401567	20010926
PRIORITY APPLN. INFO.:			FR 1994-13861 A	19941118
			WO 1995-FR1517 W	19951117

AB The use of polylysine for preparing pharmaceutical compns. or combinations useful for treating neural degeneration, infectious, traumatic and toxic neuropathies, auto-immune degenerative diseases and proliferative diseases, is disclosed. Polylysine conjugates are also disclosed.

IT 50-81-7DP, Vitamin C, conjugates with polylysine 51-45-6DP, Histamine, conjugates with polylysine 51-84-3DP, Acetylcholine, conjugates with polylysine 52-90-4DP, Cysteine, conjugates with polylysine 56-12-2DP, γ-Aminobutyric acid, conjugates with polylysine 56-69-9DP, 5-Hydroxytryptophan, conjugates with polylysine 57-10-3DP, Palmitic acid, conjugates with polylysine 57-11-4DP, Stearic acid, conjugates with polylysine 57-83-0DP, Progesterone, conjugates with polylysine 57-88-5DP, Cholesterol, conjugates with polylysine 59-02-9DP, α-Tocopherol, conjugates with polylysine 59-92-7DP, conjugates with polylysine 60-33-3DP, α-Linoleic acid, conjugates with polylysine 63-68-3DP, Methionine, conjugates with polylysine 71-00-1DP, Histidine, conjugates with polylysine 73-22-3DP, Tryptophan, conjugates with polylysine 107-35-7DP, Taurine, conjugates with polylysine 112-80-1DP, Oleic acid, conjugates with polylysine 123-99-9DP, Azelaic acid, conjugates with polylysine 143-07-7DP, **Lauric** acid, conjugates with polylysine 302-79-4DP, Retinoic acid, conjugates with polylysine 362-07-2DP, 2-Methoxyestradiol, conjugates with polylysine 373-49-9DP, Palmitoleic acid, conjugates with polylysine 544-63-8DP, Myristic acid, conjugates with polylysine **608-07-1DP, 5-Methoxytryptamine**, conjugates with polylysine 6027-13-0DP, Homocysteine, conjugates with polylysine 25104-18-1DP, Polylysine, conjugates 38000-06-5DP, Polylysine, conjugates 68000-92-0DP, Farnesylcysteine, conjugates with polylysine
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(monofunctional and/or polyfunctional polylysine conjugates for treatment of neural disorders, autoimmune diseases, and proliferative diseases)

IT **608-07-1DP, 5-Methoxytryptamine**, conjugates with polylysine
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(monofunctional and/or polyfunctional polylysine conjugates for treatment of neural disorders, autoimmune diseases, and proliferative diseases)

RN 608-07-1 HCAPLUS
CN 1H-Indole-3-ethanamine, 5-methoxy- (9CI) (CA INDEX NAME)



L22 ANSWER 27 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:380438 HCAPLUS Full-text
DOCUMENT NUMBER: 122:142602
TITLE: Incorporating poly-N-vinyl amide in a transdermal system
INVENTOR(S): Landrau, Felix A.; Nedberge, Diane E.; Hearney, Linda M.
PATENT ASSIGNEE(S): Alza Corp., USA
SOURCE: PCT Int. Appl., 70 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9501167	A2	19950112	WO 1994-US7267	19940624
W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, UZ, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9473962	A1	19950124	AU 1994-73962	19940624
EP 705097	A1	19960410	EP 1994-923905	19940624
EP 705097	B1	19970305		
EP 705097	B2	20040114		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
JP 08512054	T2	19961217	JP 1994-503596	19940624
AT 149349	E	19970315	AT 1994-923905	19940624
ZA 9404608	A	19950324	ZA 1994-4608	19940627
US 6248348	B1	20010619	US 1999-300010	19990426
PRIORITY APPLN. INFO.:			US 1993-82624 A	19930625
			WO 1994-US7267 W	19940624
			US 1995-564058 A1	19951214

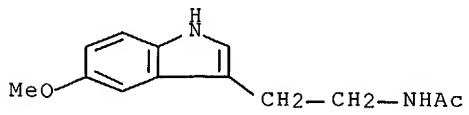
AB A composition comprising a matrix to be placed on a selected skin or other body site contains sufficient amts. of drug, permeation enhancer(s), and poly(N-vinyl amide) to continuously administer the drug to the site in a therapeutically effective amount, and the permeation-enhancing mixture in an amount sufficient to enhance the permeability of the skin to the drug. The device shows increased transdermal flux as compared to the transdermal flux of the drug from a device containing no poly(N-vinyl amide). Incorporating poly(N-vinyl amide) into the transdermal system also improves the adhesion and stability of the system. Thus, a film reservoir containing buspirone 20, glycerol monooleate 20, ethylene/vinyl acetate copolymer 50, and N-vinyl-2-pyrrolidone 10 weight% laminated to Medpar backing on one side and an acrylate contact adhesive on the other side was attached to the stratum corneum of a disk of epidermis in vitro. The flux of buspirone through the epidermis into water was improved by the presence of N-vinyl-2-pyrrolidone.

IT 50-21-5D, Lactic acid, esters 57-63-6, Ethynylestradiol 58-22-0, Testosterone **73-31-4, Melatonin** 88-12-0, N-Vinyl-2-pyrrolidone, biological studies 321-64-2, Tacrine 6283-92-7, **Lauryl** lactate 25496-72-4, Glyceryl monooleate 26545-74-4, Glycerol monolinoleate 27215-38-9, Glycerol monolaurate 28981-97-7, Alprazolam 36505-84-7, Buspirone 60282-87-3, Gestodene
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(incorporating poly-N-vinyl amide in a transdermal system)

IT **73-31-4, Melatonin**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(incorporating poly-N-vinyl amide in a transdermal system)

RN 73-31-4 HCAPLUS

CN Acetamide, N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)

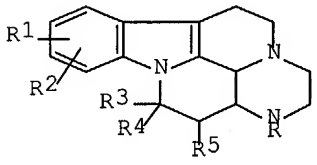


L22 ANSWER 28 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1989:231945 HCAPLUS Full-text

DOCUMENT NUMBER: 110:231945
TITLE: Preparation of 17-aza-20,21-dinoreburnamenines as analgesic agents
INVENTOR(S): Aktogu, Nurgun; Clemence, Francois
PATENT ASSIGNEE(S): Roussel-UCLAF, Fr.
SOURCE: Eur. Pat. Appl., 31 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 287468	A2	19881019	EP 1988-400901	19880414
EP 287468	A3	19900502		
EP 287468	B1	19930310		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
FR 2614022	A1	19881021	FR 1987-5361	19870415
FR 2614022	B1	19891201		
HU 46326	A2	19881028	HU 1988-1921	19880414
HU 206712	B	19921228		
US 4886802	A	19891212	US 1988-181657	19880414
AT 86624	E	19930315	AT 1988-400901	19880414
CA 1324793	A1	19931130	CA 1988-564126	19880414
ES 2053780	T3	19940801	ES 1988-400901	19880414
JP 63295576	A2	19881201	JP 1988-91888	19880415
PRIORITY APPLN. INFO.:			FR 1987-5361	19870415
			EP 1988-400901	19880414

OTHER SOURCE(S): CASREACT 110:231945; MARPAT 110:231945
GI



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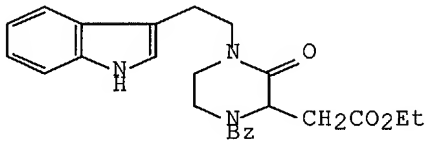

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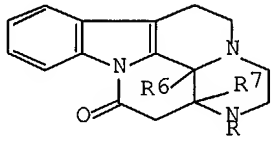


III

AB The title compds. (I; R = H, alkyl, aralkyl, Bz, alkanoyl; R1, R2 = H, halo, alkyl, alkoxy, OH, CF3, NO2; R3 = H, OH; R4, R5 = H; R3R4 = O; R4R5 = bond) were prepared N-[2-(1H-Indol-3-yl)ethyl]ethanediamine (preparation given) was refluxed with di-Et maleate in EtOH to give, after benzoylation of the product, indolylethylpiperazine II which was heated 3 h in POCl3 and the product stirred 1 h with HI in Me2CO to give oxoeburnamenine (III; R = Bz, R6R7 = bond). The latter was stirred with NaBH4 in HOAc to give, after hydrolysis and N-methylation, 16α-(±)-III (R = Me, R6 = R7 = H) which gave 100% extension of reaction time of mice in the hot-plate test at 100 mg/kg orally.

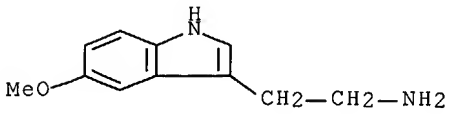
IT 61-54-1, Tryptamine 103-63-9, 2-Phenylethyl bromide 107-14-2,

Chloroacetonitrile 112-16-3, **Lauroyl** chloride **608-07-1**
, **5-Methoxytryptamine** 3610-36-4, 6-
Methoxytryptamine 3764-94-1, 5-Chlorotryptamine 62500-90-7,
6-Methyltryptamine
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of analgesic agents)

IT **608-07-1, 5-Methoxytryptamine**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of analgesic agents)

RN 608-07-1 HCAPLUS

CN 1H-Indole-3-ethanamine, 5-methoxy- (9CI) (CA INDEX NAME)



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